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Service Manual

ORDER NO.
ARP2024

AUDIO/VIDEO STEREO RECEIVER

VSX-9700S

KUC, SD

MODEL VSX – 9700S HAS FOLLOWING VERSIONS :

Type	Power requirement	Export destination
KUC	AC120V only	U.S.A. and Canada
SD	AC110V,120V – 127V,220V,240V (switchable)	Kingdom of Saudi Arabia and General market

- **Refer to the service manual ARP1838, VSX – 9500S/KUC type.**
- **This manual is applicable to the VSX – 9700S/KUC and SD types.**

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

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1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

The VSX−9700S/KUC and SD types are the same as the VSX−9500S/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		VSX−9500S/ KUC	VSX−9700S/ KUC	VSX−9700S/ SD	
	FRONT CONTROL A assembly	AWZ2513	AWZ2940	AWZ2940	
	VIDEO/SUR/CONTROL assembly	AWZ2511	AWZ2942	AWZ2942	
	C1 Capacifor	....	....	ACG1030	
⚠	S3 Line voltage selector switch (AC110V,120V−127V,220V,240V)	....	....	AKX−507	
⚠	S2 Line voltage selector switch (AC110V−127V,220V−240V)	....	....	AKX1004	
	S4 Slide switch	....	....	ASH−004	
⚠	T1 Power transformer	ATS1205	ATS1205	....	
⚠	T1 Power transformer	....	....	ATS1206	
⚠	FU1 Fuse (10A/125V)	AEK−310	AEK−310	....	
⚠	FU1 Fuse (6.3A/125V)	....	....	AEK−109	
⚠	FU2 Fuse (6.3A/125V)	....	....	AEK−109	
	Fuse holder	....	....	AKR−032	
⚠	AC Power cord	ADG1057	ADG1057	ADG1015	
	Front panel	ANB1302	ANB1385	ANB1385	
	Panel base	AMB1494	AMB1349	AMB1349	
	Insulator assembly	AMR1434	....	....	
	Insulator assembly	AMR1435	....	....	
	Leg assembly	....	AMR1159	AMR1159	
	Rotary knob	AAB1056	AAB1157	AAB1157	
	Hinge knob	AAD1394	AAD1772	AAD1772	
	Hinge knob	AAD1395	AAD1773	AAD1773	
	Hinge knob	AAD1396	AAD1774	AAD1774	
	Screw	....	ABA1105	ABA1105	
	Bush	ABF1018	....	....	
	Antenna set	AEA1007	....	....	
	FM antenna	....	ADH1004	ADH1004	
	Loop antenna assembly	....	ATB1005	ATB1005	
	Packing case	AHD1620	AHD1824	AHD1824	
	Operating instructions (English)	ARB1173	ARB1234	ARB1234	
	Remote control unit	AXD1100	AXD1139	AXD1139	

FRONT CONTROL A assembly (AWZ2940)

The FRONT CONTROL A assembly (AWZ2940) is the same as the FRONT CONTROL A assembly (AWZ2513) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2513	AWZ2940	
	S818	ASG−711	....	

VIDEO/SUR/CONTROL assembly (AWZ2942)

The VIDEO/SUR/CONTROL assembly (AWZ2942) is the same as the VIDEO/SUR/CONTROL assembly (AWZ2511) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2511	AWZ2942	
	IC308	UPC78L05	....	
	Q309	RN2201	....	
	Q310	RN1201	....	
	Q432	....	RN2203	
	D397	....	1SS252	
	D398	....	S5566	
	C385	CEAS100M50	....	
	C423	CQMA682K50	CQMA562K50	
	C473,C474	CCMSL680J50	CKMYB181K50	
	C475,C476	CCDSL221J50	....	
	VR421	ACS1020	....	
	R330	RD1/8PM680J	....	
	R397	....	RD1/8PM681J	
	R421,R422	RD1/8PM513J	RD1/8PM223J	
	R423−R426	RD1/8PM103J	....	
	R433	RD1/8PM392J	RD1/8PM822J	
	R434	RD1/8PM103J	RD1/8PM512J	
	R440,R478	RD1/8PM183J	RD1/8PM433J	
	R475	RD1/8PM682J	RD1/8PM912J	

2. REMOTE CONTROL UNIT (AXD1139)

CONTRAST OF REMOTE CONTROL UNIT

The REMOTE CONTROL UNIT (AXD1139) is the same as the REMOTE CONTROL UNIT (AXD1100) with the exception of the following sections.

Contrast of miscellaneous parts

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	Name plate	AZA1190	AZA1248	
	Rubber sheet	AZA1192	AZA1247	

Contrast of electrical parts

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	IC01 (Micro computer)	PD5108−A	PD5140	

Note : The circuit of the remote control unit (AXD1100) with built−in microcomputer has been changed according to the preceeding table to model (AXD1139).
The key functions of the new remote control unit have been changed according to the following table.

Mark	Switch No.	Key function name		Remarks
		AXD1100	AXD1139	
	S−5	VCR CH+	VCR CH+/ TAPE SELECT	
	S−13	⏮ CHP/FR−TM	CD/VDP POWER	
	S−14	⏭ /SEARCH	⏮ CHP/FR−TM	
	S−11	DISC SEL/ DISPLAY CALL	⏭ /SEARCH	
	S−15	PROG	DISC SEL/ DISPLAY CALL	
	S−36	1•12/13•24/ CH−RETURN	PROG	
	S−32	BAND/DUAL	BAND/CH−RETURN	

assembly

CONTROL

2. REMOTE CONTROL UNIT (AXD1139)

CONTRAST OF REMOTE CONTROL UNIT

The REMOTE CONTROL UNIT (AXD1139) is the same as the REMOTE CONTROL UNIT (AXD1100) with the exception of the following sections.

Contrast of miscellaneous parts

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	Name plate Rubber sheet	AZA1190 AZA1192	AZA1248 AZA1247	

Contrast of electrical parts

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	IC01 (Micro computer)	PD5108−A	PD5140	

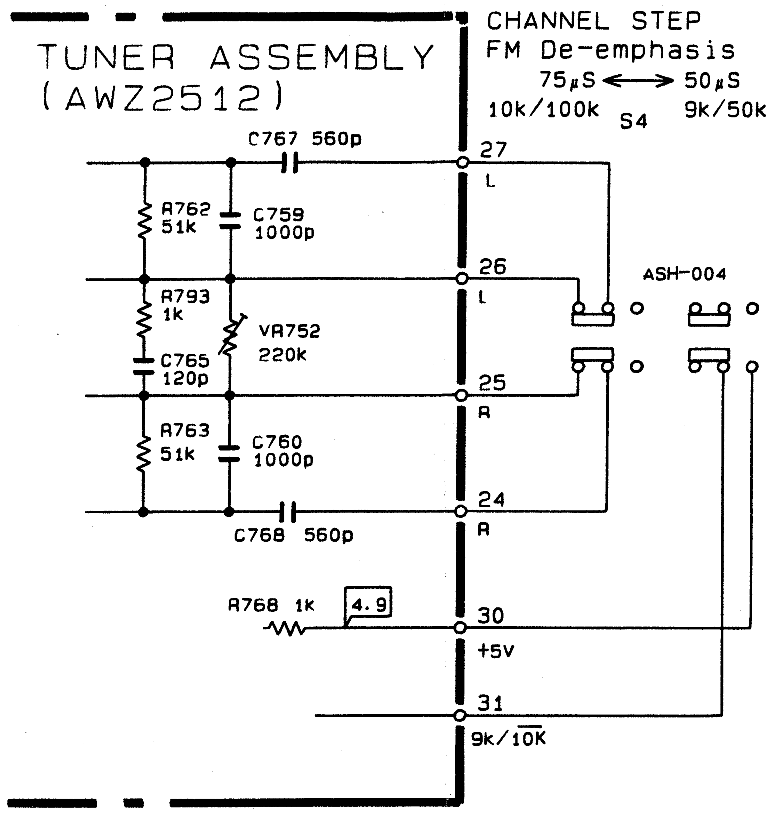
Note : The circuit of the remote control unit (AXD1100) with built−in microcomputer has been changed according to the preceeding table to model (AXD1139).
The key functions of the new remote control unit have been changed according to the following table.

Mark	Switch No.	Key function name		Remarks
		AXD1100	AXD1139	
	S−5	VCR CH+	VCR CH+/ TAPE SELECT	
	S−13	⏮ CHP/FR−TM	CD/VDP POWER	
	S−14	⏭ /SEARCH	⏮ CHP/FR−TM	
	S−11	DISC SEL/ DISPLAY CALL	⏭ /SEARCH	
	S−15	PROG	DISC SEL/ DISPLAY CALL	
	S−36	1•12/13•24/ CH−RETURN	PROG	
	S−32	BAND/DUAL	BAND/CH−RETURN	

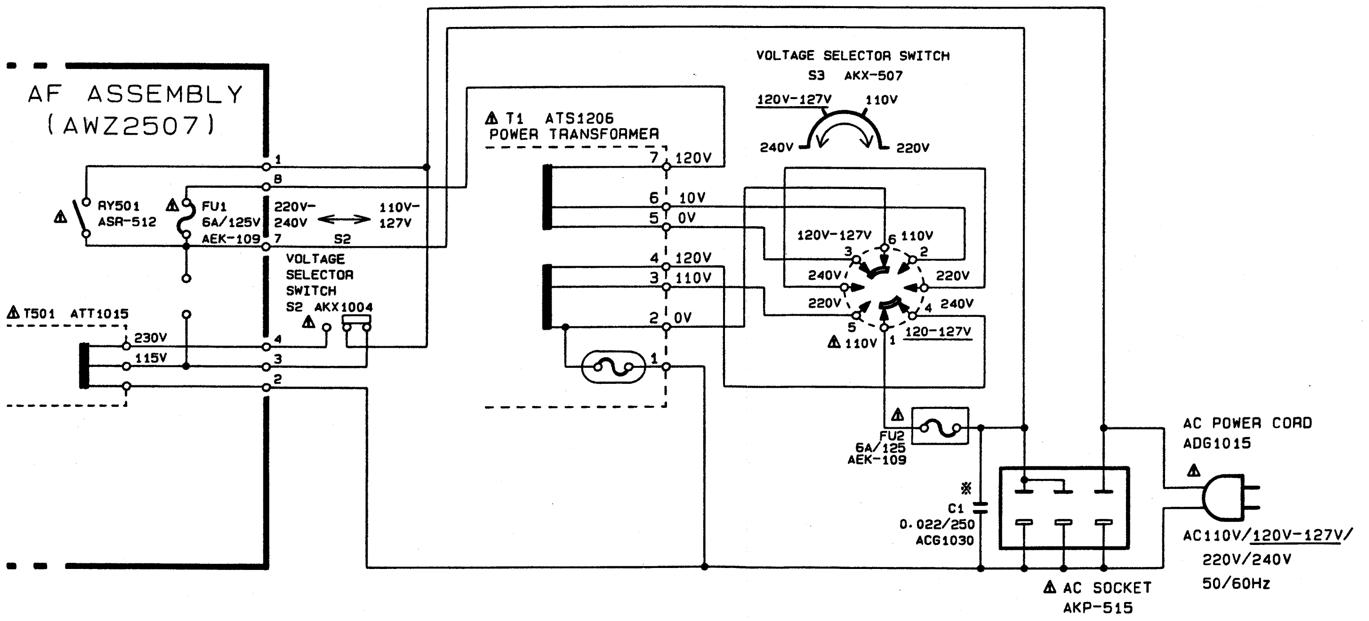
3. SCHEMATIC AND P.C.BOARDS DIAGRAM

3.1 TUNER AND POWER SUPPLY assembly (SD type only)

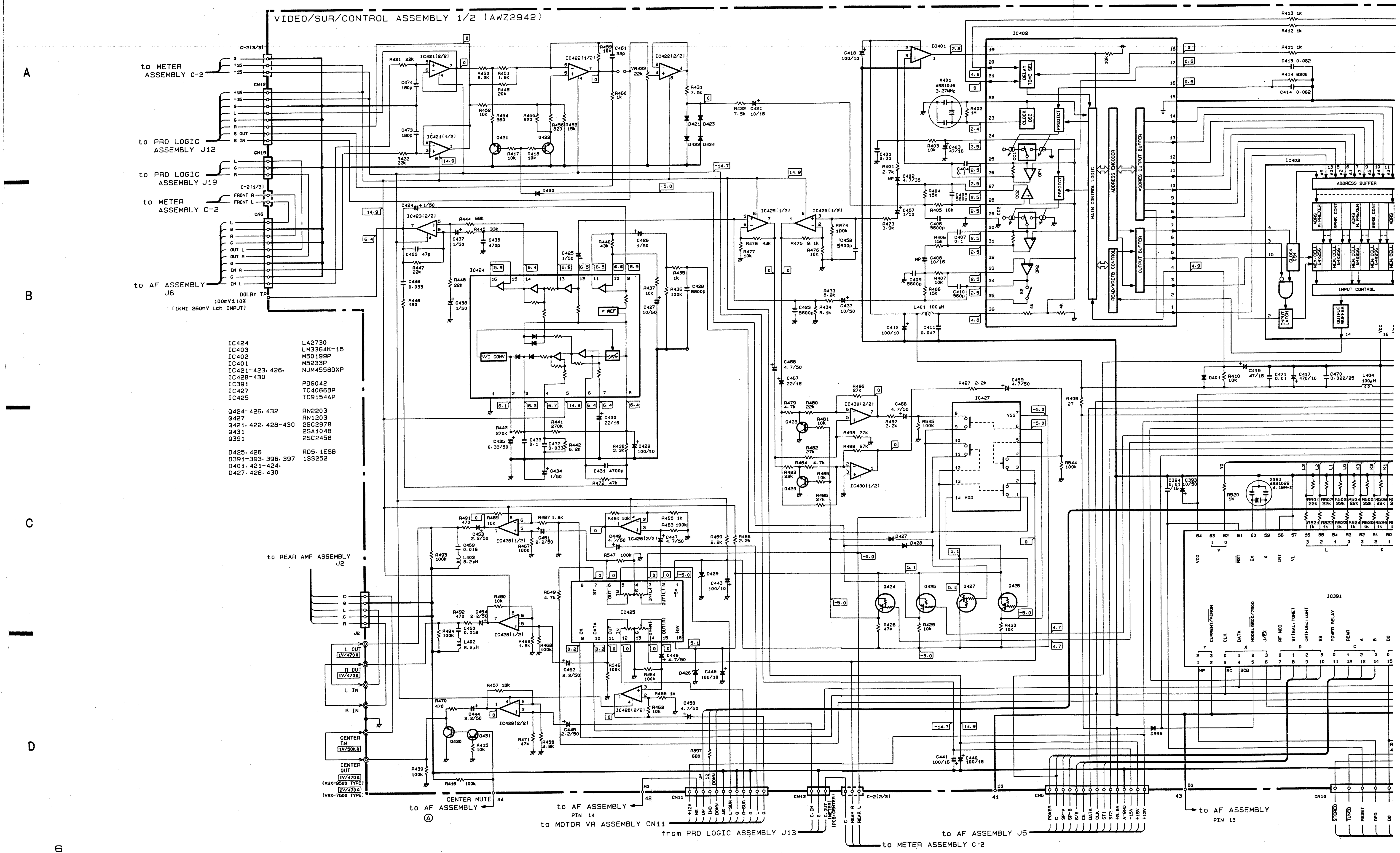
TUNER


TUNER ASSEMBLY
(AWZ2512)
CHANNEL STEP
FM De−emphasis
75μS ⟷ 50μS
10k/100k
S4
9k/50k
C767 560p
R762 51k
C759 1000p
R793 1k
VR752 220k
C765 120p
R763 51k
C760 1000p
C768 560p
ASH−004
27 L
26 L
25 R
24 R
R768 1k
4.9
30 +5V
31 9k/10K

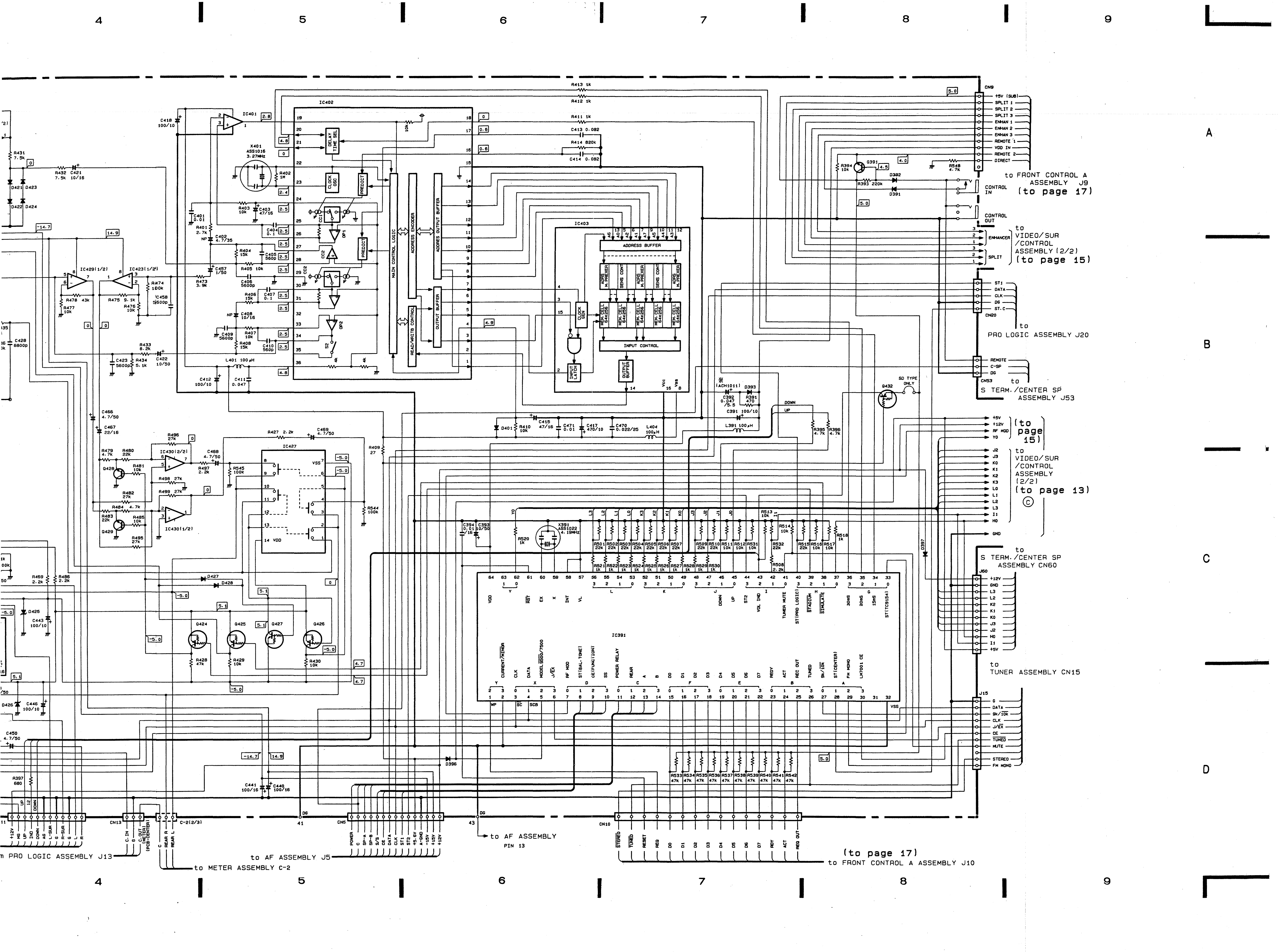
POWER SUPPLY


AF ASSEMBLY
(AWZ2507)
RY501 ASR−512
FU1 6A/125V AEK−109
220V−240V ⟷ 110V−127V
S2
VOLTAGE SELECTOR SWITCH
S2 AKX1004
T501 ATT1015
230V
115V
T1 ATS1206
POWER TRANSFORMER
7 120V
6 10V
5 0V
4 120V
3 110V
2 0V
1
VOLTAGE SELECTOR SWITCH
S3 AKX−507
120V−127V
110V
240V
220V
FU2 6A/125 AEK−109
※
C1 0.022/250 ACG1030
AC SOCKET AKP−515
AC POWER CORD ADG1015
AC110V/120V−127V/220V/240V 50/60Hz

3.2 VIDEO/SUR/CONTROL assembly (AWZ2942) (1/2)

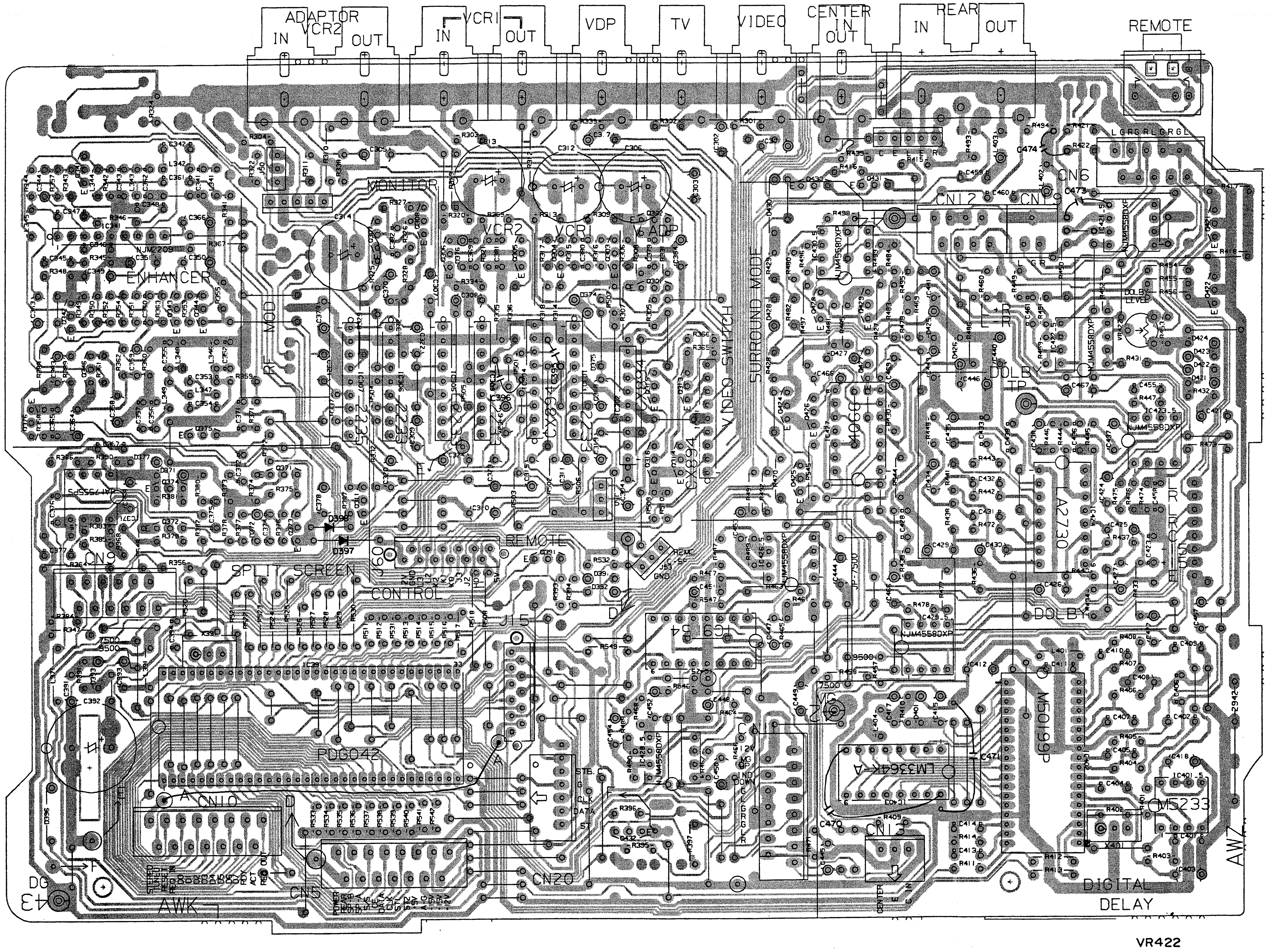

VIDEO/SUR/CONTROL ASSEMBLY 1/2 (AWZ2942)
to METER ASSEMBLY C-2
to PRO LOGIC ASSEMBLY J12
to PRO LOGIC ASSEMBLY J19
to METER ASSEMBLY C-2
to AF ASSEMBLY J6
DOLBY TP
100mV±10%
(1kHz 260mV Lch INPUT)
to REAR AMP ASSEMBLY J2
L OUT 1V/470Ω
R OUT 1V/470Ω
L IN
R IN
CENTER IN 1V/50kΩ
CENTER OUT 1V/470Ω (VSX-9500 TYPE) 2V/470Ω (VSX-7500 TYPE)
CENTER MUTE
to AF ASSEMBLY
to AF ASSEMBLY PIN 14
to MOTOR VR ASSEMBLY CN11
from PRO LOGIC ASSEMBLY J13
to METER ASSEMBLY C-2
to AF ASSEMBLY J5
to AF ASSEMBLY PIN 13
IC401
IC402
IC403
IC391
IC424
IC425
IC427
X401 ASS1016 3.27MHz
X391 ASS1022 4.19MHz
DELAY TIME SEL
CLOCK OSC
PREDICT
MAIN CONTROL LOGIC
ADDRESS ENCODER
ADDRESS OUTPUT BUFFER
OUTPUT BUFFER
READ/WRITE CONTROL
ADDRESS BUFFER
INPUT CONTROL
INPUT LATCH
OUTPUT BUFFER
CLOCK GEN
V REF
V/I CONV
CN5
CN6
CN10
CN11
CN12
CN13
CN19
1
2
3
4
5
6
A
B
C
D

IC424	LA2730
IC403	LM3364K-15
IC402	M50199P
IC401	M5233P
IC421-423, 426, IC428-430	NJM4558DXP
IC391	PDG042
IC427	TC4066BP
IC425	TC9154AP
Q424-426, 432	RN2203
Q427	RN1203
Q421, 422, 428-430	2SC2878
Q431	2SA1048
Q391	2SC2458
D425, 426	RD5.1ESB
D391-393, 396, 397 D401, 421-424, D427, 428, 430	1SS252



IC402
DELAY TIME SEL
CLOCK OSC
PREDICT
MAIN CONTROL LOGIC
ADDRESS ENCODER
ADDRES OUTPUT BUFFER
OUTPUT BUFFER
READ/WRITE CONTROL
X401 ASS1016 3.27MHz
IC401
IC403
ADDRESS BUFFER
INPUT CONTROL
INPUT LATCH
CLOCK GEN
OUTPUT BUFFER
IC429(1/2)
IC423(1/2)
IC430(2/2)
IC430(1/2)
IC427
Q428
Q429
Q424
Q425
Q427
Q426
IC391
X391 ASS1022 4.19MHz
Q391
Q432
SD TYPE ONLY
D391
D392
D393
D396
D397
D401
D421
D422
D423
D424
D425
D426
D427
D428
L391 100μH
L401 100μH
L404 100μH
CN9
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REMOTE 1
VDD IN
REMOTE 2
DIRECT
to FRONT CONTROL A ASSEMBLY J9 (to page 17)
CONTROL IN
CONTROL OUT
ENHANCER
SPLIT
to VIDEO/SUR /CONTROL ASSEMBLY (2/2) (to page 15)
CN20
ST1
DATA
CLK
DG
ST.C
to PRO LOGIC ASSEMBLY J20
CN53
REMOTE
C-SP
DG
to S TERM./CENTER SP ASSEMBLY J53
+5V
+12V
RF MOD
Y0
(to page 15)
J2 J3 K0 K1 K2 K3 L0 L1 L2 L3 I1 H0
to VIDEO/SUR /CONTROL ASSEMBLY (2/2) (to page 13) Ⓒ
GND
to S TERM./CENTER SP ASSEMBLY CN60
J60
to TUNER ASSEMBLY CN15
J15
DATA
SK/10K
CLK
J/EX
CE
TUNED
MUTE
STEREO
FM MONO
CN10
STEREO TUNED RESET REQ D0 D1 D2 D3 D4 D5 D6 D7 RDY ACT REQ OUT
(to page 17)
to FRONT CONTROL A ASSEMBLY J10
CN5
POWER C SP-A SP-B S/S CE DATA CLK ST1 ST2 +5.6V A-GND -15V +15V +12V
to AF ASSEMBLY J5
to AF ASSEMBLY PIN 13
DG
41
43
CN13
C.IN S C.OUT (METER) (PCB CENTER)
C-2(2/3)
REAR R REAR L
to METER ASSEMBLY C-2
+12V MG UP IND DOWN AG L-SUR G R-SUR S L R
m PRO LOGIC ASSEMBLY J13
VDD RST EX X INT VL DOWN UP ST2 VOL IND TUNER MUTE ST(PRO LOGIC) STADIUM SIMULATE 30MS 20MS 15MS ST(TC9154)
CURRENT/MINOR CLK DATA MODEL3500/7500 J/EX RF MOD ST(BAL.TONE) CE(FUNCTION) SS POWER RELAY REAR A B D0 D1 D2 D3 D4 D5 D6 D7 RDY REC OUT TUNED SK/10K ST(CENTER) FM MONO LM7001 CE
WP SC SCB VSS
R413 1k
R412 1k
R411 1k
C413 0.082
R414 820k
C414 0.082
R394 10k
R393 220k
R548 4.7k
R395 4.7k
R396 4.7k
C392 0.047/5.5
R391 470
C391 100/10
R513 10k
R514 10k
R532 22k
R508 2.2k
R518 1k
R520 1k
C394 0.01
C393 10/50
R533 47k R534 47k R535 47k R536 47k R537 47k R538 47k R539 47k R540 47k R541 47k R542 47k
C418 100/10
R402 1M
R403 10k
C403 47/16
C401 0.01
R401 2.7k
C402 4.7/35
C404 0.1
R404 15k
C405 560p
R405 10k
C457 1/50
R473 3.9k
C406 5600p
R406 15k
C407 0.1
C408 10/16
R407 10k
C409 5600p
R408 15k
C410 560p
R433 8.2k
R434 5.1k
C422 10/50
C423 5600p
C412 100/10
C411 0.047
R431 7.5k
R432 7.5k
C421 10/16
R474 100k
C458 5600p
R475 9.1k
R476 10k
R478 43k
R477 10k
C428 6800p
C466 4.7/50
C467 22/16
R496 27k
R479 4.7k
R480 22k
R481 10k
C468 4.7/50
R497 2.2k
R545 100k
R498 27k
R482 27k
R499 27k
R484 4.7k
R483 22k
R485 10k
R495 27k
R427 2.2k
C469 4.7/50
R409 27
R544 100k
R410 10k
C415 47/16
C471 0.01
C417 470/10
C470 0.022/25
R469 2.2k
R486 2.2k
C443 100/10
C446 100/10
C450 4.7/50
R397 680
R428 47k
R429 10k
R430 10k
C441 100/16
C440 100/16
-14.7 14.9 2.8 4.8 0 2.4 2.5 4.9 -5.0 5.1 4.7 5.0 4.0 4.5

VIDEO/SUR/CONTROL assembly (AWZ2942)


ADAPTOR
IN
VCR2
OUT
VCR1
IN
OUT
VDP
TV
VIDEO
CENTER
IN
OUT
REAR
IN
OUT
REMOTE
MONITOR
VCR2
VCR1
ADP
ENHANCER
NJM2209
RF MOD
SURROUND MODE
VIDEO SWITCH
SPLIT SCREEN
CONTROL
REMOTE
CX894
J15
PD6042
CN10
CN5
CN20
CN13
CN12
CN7
CN6
CN9
AWK
DG
DOLBY
DOLBY TP
DOLBY LEVEL
A2730
NJM4558DXP
M50199P
LM3364K-A
M5233
DIGITAL
DELAY
AWZ2942
VR422

Q341 IC341
Q376 Q346 Q342–Q344 Q375
IC371 Q371–Q374
IC391
Q311
Q302–Q308
IC301–IC307 IC309
Q391
Q313–Q316
IC425
Q432 IC428
Q430 Q431 IC430
Q424–Q429
IC426
IC429
IC403
IC422
IC424
IC402
IC421 IC423
IC401
Q421
Q422

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

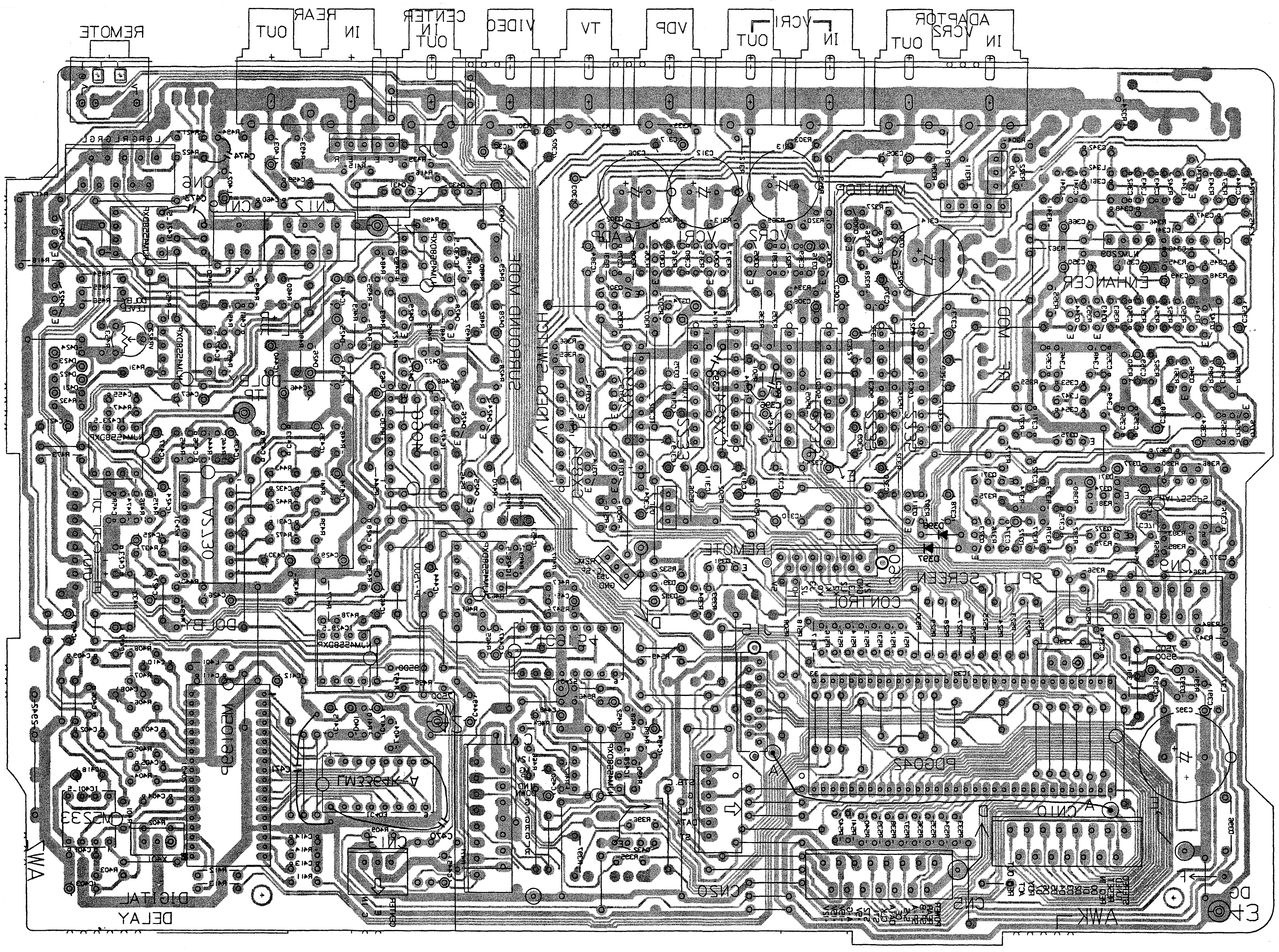
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

VIDEO/SUR/CONTROL assembly (AWZ2942)


REMOTE
REAR
OUT
IN
CENTER
IN
OUT
VIDEO
TV
VDP
VCR1
OUT
IN
ADAPTOR
VCR2
OUT
IN
MONITOR
VCR1
VCR2
ENHANCER
SURROUND SWITCH
DOLBY
DOLBY
REMOTE
SPLIT SCREEN
CONTROL
PDG042
CN10
CN9
CN8
CN20
CN12
CN13
AWK-1
AWZ
DIGITAL
DELAY
A
B
C
D
A
B
C
D

VR422

Q341 IC341　Q302–Q308　Q430 Q431 IC430　IC421 Q421

Q376　Q346 Q342–Q344 Q375　IC301–IC307 IC309　Q313–Q316　Q424–Q429　IC422　IC423 Q422

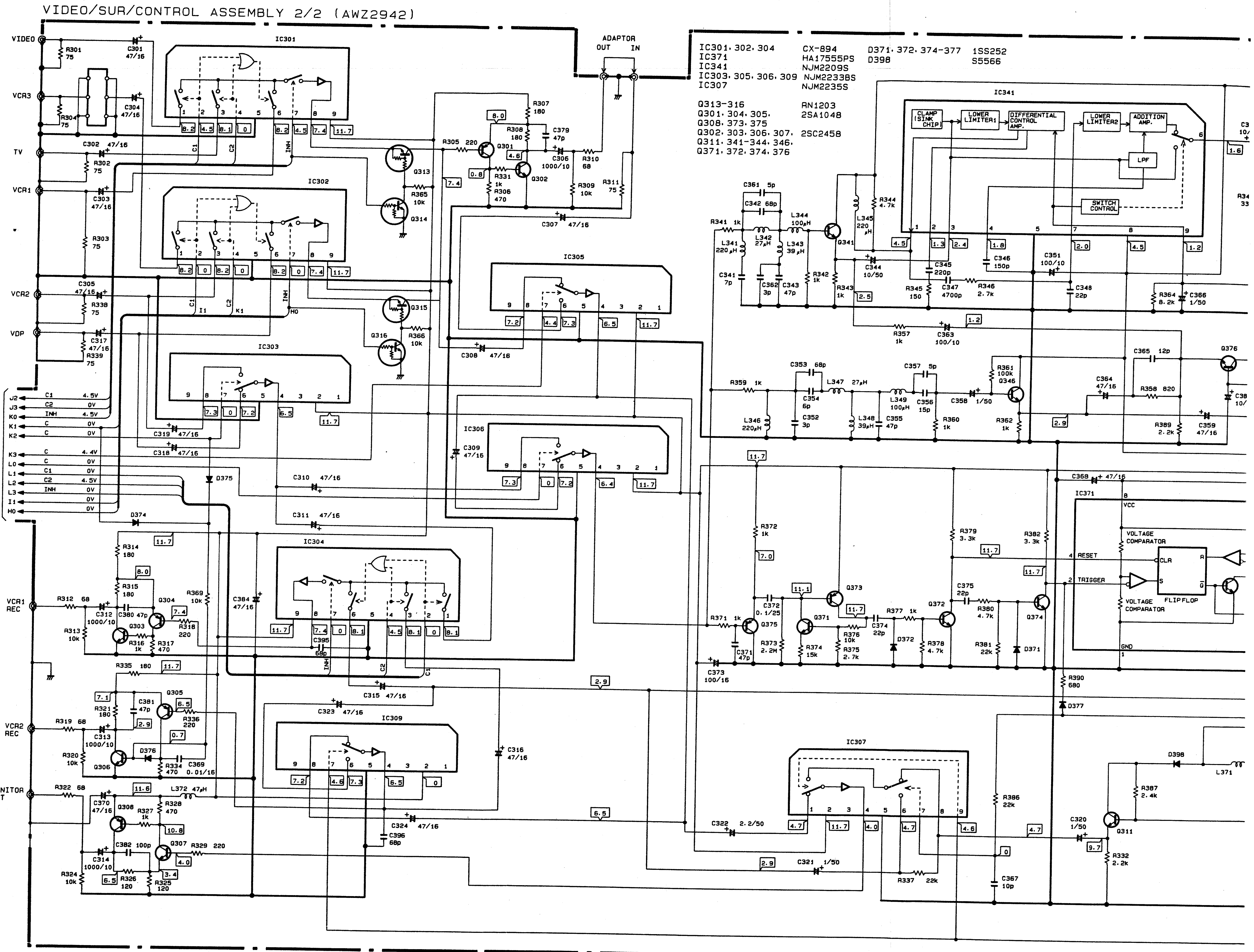
IC371　Q371–Q374　Q311　Q391　IC425　IC426　IC429　IC424

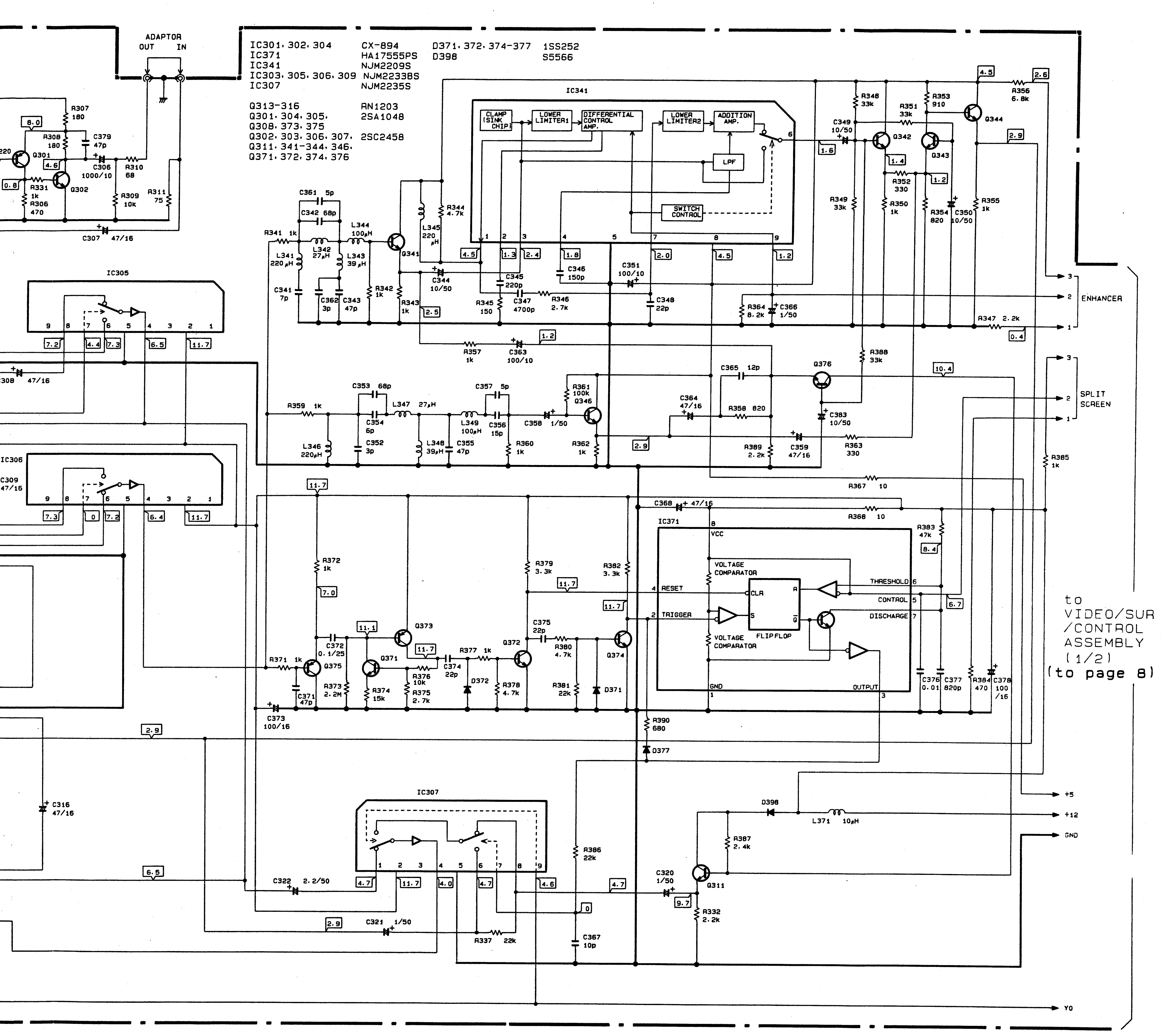
IC391　Q432 IC428　IC403　IC402　IC401

NOTE:
This picture shows the foil side of the printed circuit.

3.3 VIDEO/SUR/CONTROL assembly (AWZ2942) (2/2)

(to page 8)
to ©


VIDEO/SUR/CONTROL ASSEMBLY 2/2 (AWZ2942)
A
B
C
D
VIDEO
VCR3
TV
VCR1
VCR2
VDP
VCR1 REC
VCR2 REC
MONITOR OUT
ADAPTOR
OUT
IN
IC301, 302, 304 CX-894
IC371 HA17555PS
IC341 NJM2209S
IC303, 305, 306, 309 NJM2233BS
IC307 NJM2235S
Q313-316 RN1203
Q301, 304, 305, Q308, 373, 375 2SA1048
Q302, 303, 306, 307, Q311, 341-344, 346, Q371, 372, 374, 376 2SC2458
D371, 372, 374-377 1SS252
D398 S5566
IC301
IC302
IC303
IC304
IC305
IC306
IC307
IC309
IC341
IC371
CLAMP (SINK CHIP)
LOWER LIMITER1
DIFFERENTIAL CONTROL AMP.
LOWER LIMITER2
ADDITION AMP.
LPF
SWITCH CONTROL
VCC
VOLTAGE COMPARATOR
RESET
TRIGGER
CLR
FLIPFLOP
GND
J2 C1 4.5V
J3 C2 0V
K0 INH 4.5V
K1 C 0V
K2 C 0V
K3 C 4.4V
L0 C 0V
L1 C1 0V
L2 C2 4.5V
L3 INH 0V
I1 0V
H0 0V



ADAPTOR
OUT IN
IC341
CLAMP (SINK CHIP)
LOWER LIMITER1
DIFFERENTIAL CONTROL AMP.
LOWER LIMITER2
ADDITION AMP.
LPF
SWITCH CONTROL
IC305
IC306
IC371
VCC
VOLTAGE COMPARATOR
FLIPFLOP
RESET
TRIGGER
THRESHOLD
CONTROL
DISCHARGE
GND
OUTPUT
IC307
ENHANCER
SPLIT SCREEN
+5
+12
GND
Y0
Q301
Q302
Q311
Q341
Q342
Q343
Q344
Q346
Q371
Q372
Q373
Q374
Q375
Q376
D371
D372
D377
D398
L371 10μH
to VIDEO/SUR /CONTROL ASSEMBLY (1/2) (to page 8)

IC301, 302, 304	CX-894	D371, 372, 374-377	1SS252
IC371	HA17555PS	D398	S5566
IC341	NJM2209S		
IC303, 305, 306, 309	NJM2233BS		
IC307	NJM2235S		
Q313-316	RN1203		
Q301, 304, 305, Q308, 373, 375	2SA1048		
Q302, 303, 306, 307, Q311, 341-344, 346, Q371, 372, 374, 376	2SC2458		

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacitance (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
▭ : Signal voltage at (33 W + 33 W 8Ω)output (1kHz)
▭ : DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦ mA : DC current at no input signal

4. OTHERS:
➡ : Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

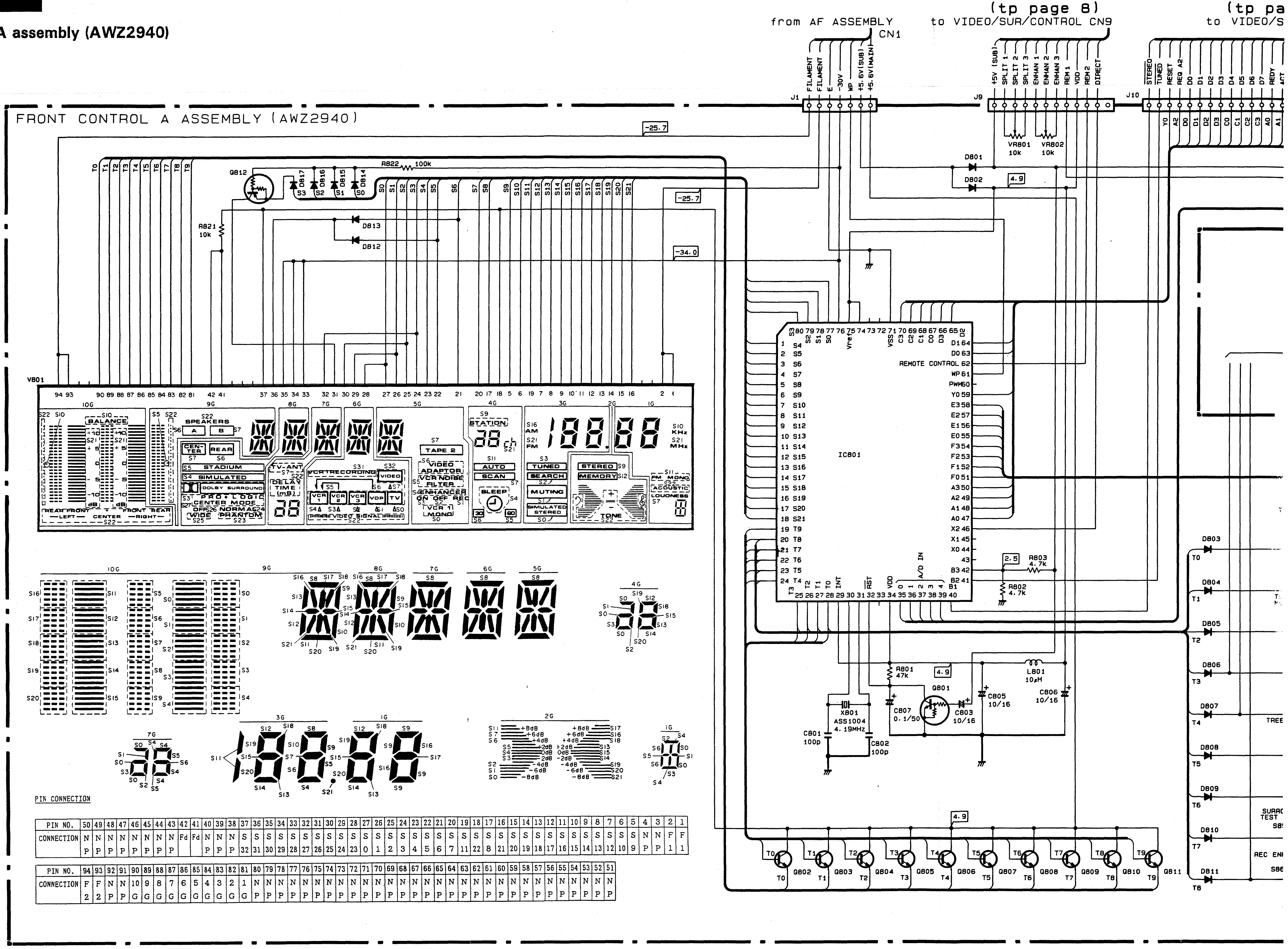
This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5.SWITCH
S1 SPEAKER IMPEDANCE SELECTOR
A,B 8ΩMAX. - 8ΩMIN.
S2 Voltage selector (SD model only)
220~240V - 110V~127V
S3 Voltage selector (SD model only)
110V,120~127V,220V,240V
S4 CHANNEL STEP/FM DE-EMPHASIS (SD model only)
75μS ⇔ 50μS
10kHz/100kHz ⇔ 9kHz/50kHz

S801:TUNING UP
S802:TUNIG DOWN
S803:ST 1
S804:ST 2
S805:ST 3
S806:ST 4
S807:ST 5
S808:FM
S809:AM
S810:ST 6
S811:ST 7
S812:ST 8
S813:ST 9
S814:ST 10
S815:RETURN
S816:AUTO/MANUAL
S817:DIRECT
S819:MEMORY
S820:MEMORY SCAN
S821:NAME
S822:HITS
S823:REAR UP
S824:REAR DOWN
S825:SIMULATED STEREO
S826:VIDEO SIGNAL SELECTOR
S827:VCR 1
S828:VCR 2
S829:VDP/CDV
S830:TV
S831:L
S832:R
S833:MUTE
S834:TAPE 2/DAT 2
S835:TAPE 1/DAT 1
S836:CD
S837:TUNER
S838:PHONO
S839:TREBLE UP
S840:TREBLE DOWN
S841:ACOUSTIC MEMORY
S842:ACOUSTIC SELECT
S843:DELAY TIME
S845:STADIUM
S846:SIMULATED
S847:BASS UP
S848:BASS DOWN
S849:VCR NOISE FILTER
S850:ENHANCER
S851:SURROUND OFF
S852:FM MODE
S853:POWER STANDBY
S854:SURROUND TEST TONE
S855:CENTER MODE
S856:VIDEO
S857:SP A
S858:SP -B
S859:VCR 1 REC SELECTOR
S860:VIDEO ADAPTOR
S861:VCR 1 MODE
S862:VCR 1 REC ENHANCER
S863:SP -REAR
S864:VCR 3
S865:LINE
S866:CENTER UP
S867:CENTER DOWN

THE UNDERLINED INDICATES THE SWITCH POSITION

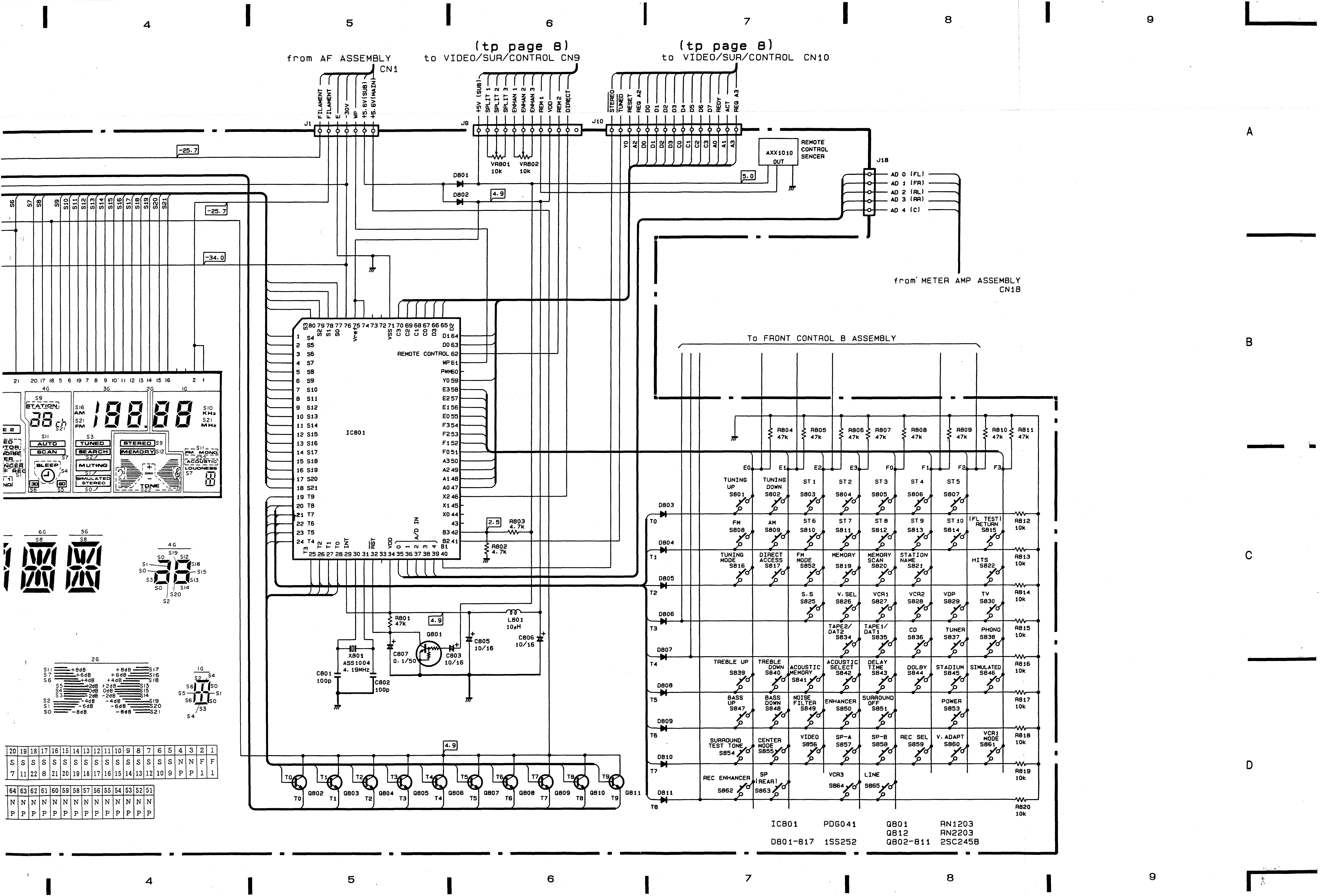
3.4 FRONT CONTROL A assembly (AWZ2940)


from AF ASSEMBLY
CN1
(tp page 8)
to VIDEO/SUR/CONTROL CN9
(tp pa
to VIDEO/S
FILAMENT
FILAMENT
E
-30V
WP
+5.6V(SUB)
+5.6V(MAIN)
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
J1
J9
J10
FRONT CONTROL A ASSEMBLY (AWZ2940)
-25.7
-34.0
4.9
2.5
Q812
D817
D816
D815
D814
D813
D812
R822 100k
R821 10k
VR801 10k
VR802 10k
D801
D802
V801
IC801
REMOTE CONTROL
R803 4.7k
R802 4.7k
R801 47k
X801 ASS1004 4.19MHz
C801 100p
C802 100p
C807 0.1/50
Q801
C803 10/16
C805 10/16
L801 10μH
C806 10/16
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
D803
D804
D805
D806
D807
D808
D809
D810
D811
T0
T1
T2
T3
T4
T5
T6
T7
T8
T9
TREE
SURRC TEST
REC ENI
SPEAKERS
BALANCE
CENTER
REAR
STADIUM
SIMULATED
DOLBY SURROUND
PRO LOGIC
CENTER MODE
OFF NORM
WIDE PHANTOM
TV-ANT
DELAY TIME
VCR RECORDING
VIDEO
VCR
VDP
TV
VIDEO SIGNAL
TAPE 2
VIDEO ADAPTOR
VCR NOISE FILTER
ENHANCER ON OFF REC
VCR 1 MONO
STATION
AUTO
SCAN
SLEEP
TUNED
SEARCH
MUTING
SIMULATED STEREO
STEREO
MEMORY
TONE
FM MONO
ACOUSTIC
LOUDNESS
KHz
MHz
AM
FM
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
+8dB
+6dB
+4dB
+2dB
0dB
-2dB
-4dB
-6dB
-8dB

PIN CONNECTION

PIN NO.	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	N P	N P	N P	N P	N P	N P	N P	N P	Fd	Fd	N P	N P	N P	S 32	S 31	S 30	S 29	S 28	S 27	S 26	S 25	S 24	S 23	S 0	S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 11	S 22	S 8	S 21	S 20	S 19	S 18	S 17	S 16	S 15	S 14	S 13	S 12	S 10	S 9	N P	N P	F 1	F 1

PIN NO.	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51
CONNECTION	F 2	F 2	N P	N P	10 G	9 G	8 G	7 G	6 G	5 G	4 G	3 G	2 G	1 G	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P



4
5
6
7
8
9
A
B
C
D
from AF ASSEMBLY
CN1
(tp page 8)
to VIDEO/SUR/CONTROL CN9
(tp page 8)
to VIDEO/SUR/CONTROL CN10
J1
FILAMENT
FILAMENT
E
-30V
WP
+5.6V(SUB)
+5.6V(MAIN)
J9
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
J10
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REQ A3
Y0
A2
D0
D1
D2
D3
C0
C1
C2
C3
A0
A1
A3
VR801
10k
VR802
10k
D801
D802
4.9
5.0
-25.7
-25.7
-34.0
AXX1010
OUT
REMOTE CONTROL SENCER
J18
AD 0 (FL)
AD 1 (FR)
AD 2 (RL)
AD 3 (RR)
AD 4 (C)
from METER AMP ASSEMBLY
CN18
To FRONT CONTROL B ASSEMBLY
IC801
S3 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 D2
S2 S1 S0 Vref VSS C3 C2 C1 C0 D3
1 S4
2 S5
3 S6
4 S7
5 S8
6 S9
7 S10
8 S11
9 S12
10 S13
11 S14
12 S15
13 S16
14 S17
15 S18
16 S19
17 S20
18 S21
19 T9
20 T8
21 T7
22 T6
23 T5
24 T4
T3 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
T2 T1 T0 INT RST VDD A/D IN 0 1 2 3 4 B1
D1 64
D0 63
REMOTE CONTROL 62
WP 61
PWM 60
Y0 59
E3 58
E2 57
E1 56
E0 55
F3 54
F2 53
F1 52
F0 51
A3 50
A2 49
A1 48
A0 47
X2 46
X1 45
X0 44
43
B3 42
B2 41
2.5
R803 4.7k
R802 4.7k
R801 47k
4.9
Q801
X801 ASS1004 4.19MHz
C801 100p
C802 100p
C807 0.1/50
C803 10/16
C805 10/16
L801 10μH
C806 10/16
4.9
Q802 Q803 Q804 Q805 Q806 Q807 Q808 Q809 Q810 Q811
T0 T1 T2 T3 T4 T5 T6 T7 T8 T9
S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21
21 20 17 18 5 6 19 7 8 9 10 11 12 13 14 15 16 2 1
4G 3G 2G 1G
S9 STATION ch S21
S16 AM S21 FM
188.88
S10 KHz S21 MHz
S11 AUTO SCAN
S3 TUNED SEARCH MUTING SIMULATED STEREO
STEREO MEMORY S9 S12
FM MONO ACOUSTIC LOUDNESS S7
SLEEP 30 60
TONE S22
6G 5G S8 S8
4G S19 S0 S12 S18 S1 S15 S3 S13 S0 S14 S20 S2
2G
S11 S7 S6 S5 S4 S3 S2 S1 S0
+8dB +6dB +4dB +2dB 0dB -2dB -4dB -6dB -8dB
S17 S16 S18 S13 S15 S14 S19 S20 S21
1G S2 S4 S6 S5 S1 S0 S3 S4
R804 47k R805 47k R806 47k R807 47k R808 47k R809 47k R810 47k R811 47k
E0 E1 E2 E3 F0 F1 F2 F3
D803 D804 D805 D806 D807 D808 D809 D810 D811
T0 T1 T2 T3 T4 T5 T6 T7 T8
TUNING UP S801
TUNING DOWN S802
ST 1 S803
ST 2 S804
ST 3 S805
ST 4 S806
ST 5 S807
FM S808
AM S809
ST 6 S810
ST 7 S811
ST 8 S812
ST 9 S813
ST 10 S814
(FL TEST) RETURN S815
TUNING MODE S816
DIRECT ACCESS S817
FM MODE S852
MEMORY S819
MEMORY SCAN S820
STATION NAME S821
HITS S822
S.S S825
V.SEL S826
VCR1 S827
VCR2 S828
VDP S829
TV S830
TAPE2/DAT2 S834
TAPE1/DAT1 S835
CD S836
TUNER S837
PHONO S838
TREBLE UP S839
TREBLE DOWN S840
ACOUSTIC MEMORY S841
ACOUSTIC SELECT S842
DELAY TIME S843
DOLBY S844
STADIUM S845
SIMULATED S846
BASS UP S847
BASS DOWN S848
NOISE FILTER S849
ENHANCER S850
SURROUND OFF S851
POWER S853
SURROUND TEST TONE S854
CENTER MODE S855
VIDEO S856
SP-A S857
SP-B S858
REC SEL S859
V.ADAPT S860
VCR1 MODE S861
REC ENHANCER S862
SP (REAR) S863
VCR3 S864
LINE S865
R812 10k R813 10k R814 10k R815 10k R816 10k R817 10k R818 10k R819 10k R820 10k
IC801 PDG041
D801-817 1SS252
Q801 RN1203
Q812 RN2203
Q802-811 2SC2458

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	N	F	F
7	11	22	8	21	20	19	18	17	16	15	14	13	12	10	9	P	P	1	1

64	63	62	61	60	59	58	57	56	55	54	53	52	51
N	N	N	N	N	N	N	N	N	N	N	N	N	N
P	P	P	P	P	P	P	P	P	P	P	P	P	P

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

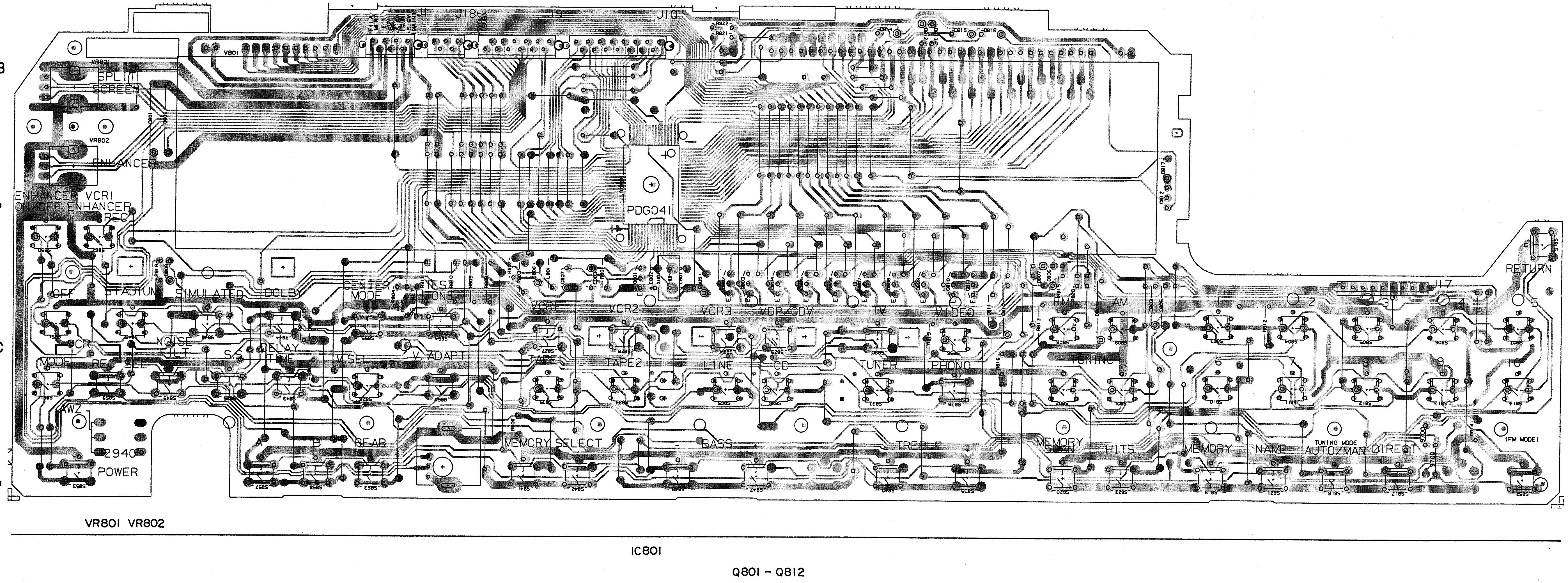
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

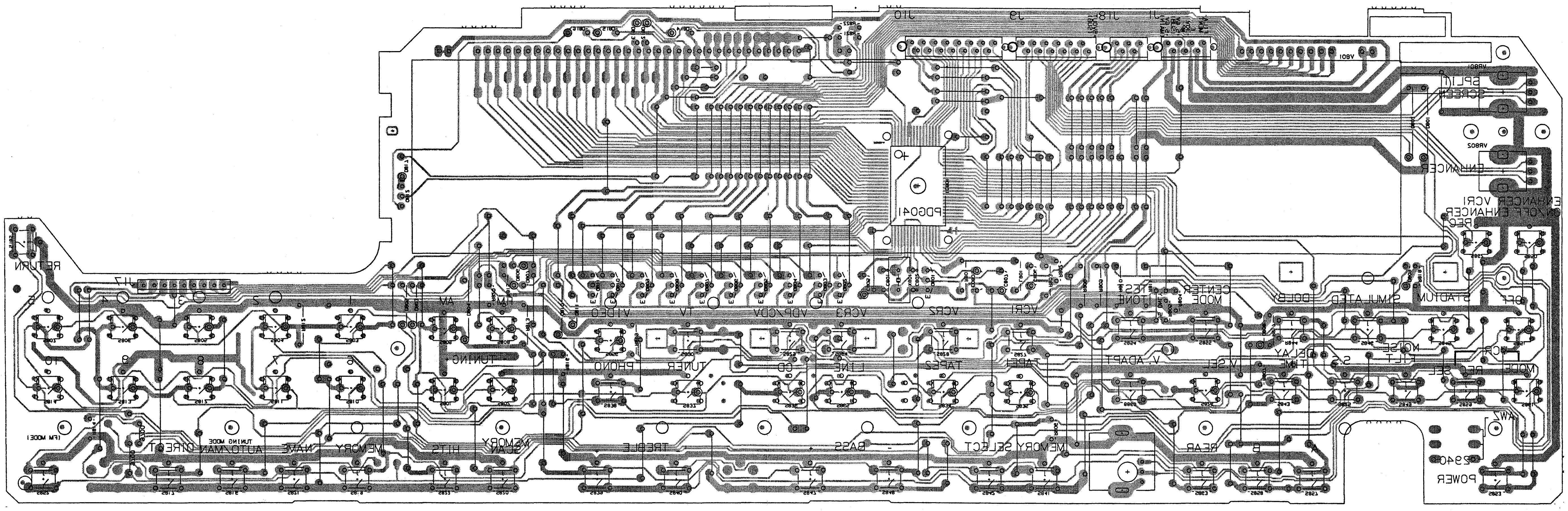
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

FRONT CONTROL A assembly (AWZ2940)


A
B
C
D
V801
J1
J18
J9
J10
VR801
SPLIT SCREEN
VR802
ENHANCER
ENHANCER ON/OFF
VCR1
ENHANCER REC
PDG041
OFF
STADIUM
SIMULATED
DOLBY
CENTER MODE
TEST TONE
VCR1
VCR2
VCR3
VDP/CDV
TV
VIDEO
FM
AM
1
2
3
4
5
RETURN
J17
MODE
NOISE FILT
DELAY TIME
V.SEL
V. ADAPT
TAPE1
TAPE2
LINE
CD
TUNER
PHONO
TUNING
6
7
8
9
10
AWZ
2940
POWER
A
B
REAR
MEMORY SELECT
BASS
TREBLE
MEMORY SCAN
HITS
MEMORY
NAME
TUNING MODE
AUTO/MAN
DIRECT
FM MODE
VR801 VR802
IC801
Q801 - Q812

FRONT CONTROL A assembly (AWZ2940)


1
2
3
4
5
6
A
B
C
D
J10
J9
J18
J11
J7
VR801
VR802
PD6041
SPLIT SCREEN
ENHANCER
ENHANCER VCR1
ON/OFF ENHANCER
REC
RETURN
STADIUM
SIMULATED
DOLBY
CENTER MODE
TEST TONE
OFF
VIDEO
TV
VDP/CDV
VCR3
VCR2
VCR1
AM
FM
TUNING
PHONO
TUNER
CD
LINE
TAPE2
TAPE1
V. ADAPT
V SEL
DELAY TIME
NOISE FILT
VCR
REC SEL
MODE
AW
FM MODE
DIRECT
TUNING MODE AUTO/MAN
NAME
MEMORY
HITS
MEMORY SCAN
TREBLE
BASS
MEMORY SELECT
REAR
POWER
S2940

VR801 VR802

IC801

Q801 – Q812

2597

Service Manual

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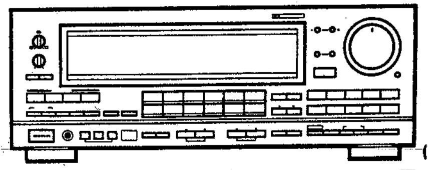
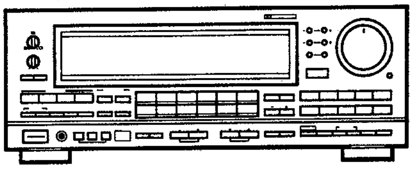
The future of sound and vision.


(VSX-7500S)


(VSX-9500S)

ORDER NO.
ARP1838

AUDIO/VIDEO STEREO RECEIVER

VSX-9500S
VSX-7500S

Original

VSX-9500S AND VSX-7500S HAVE FOLLOWING VERSIONS:

Type	Applicable model		Power requirement	Export destination
	VSX-9500S	VSX-7500S		
KUC	○	○	AC120V only	U.S.A.and Canada
SD/G	○	○	AC110V,120V−127V,220V,240V (switchable)	U.S.Military

- This manual is applicable to the VSX-9500S/KUC, SD/G, VSX-7500S/KUC and SD/G types.
- For the VSX-9500S/SD/G, VSX-7500S/KUC and SD/G types, refer to page 74−77.

CONTENTS

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2. EXPLODED VIEWS AND PARTS LIST 3
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6. REMOTE CONTROL UNIT (AXD1100) 69
7. FOR VSX-9500S/SD/G, VSX-7500/KUC AND SD/G TYPES 74
8. PANEL FACILITIES 78
9. SPECIFICATIONS 87

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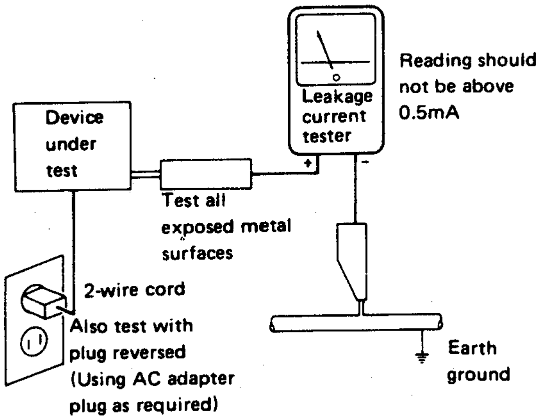
1. SAFETY INFORMATION

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Leakage current tester
+
-
Reading should not be above 0.5mA
Device under test
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

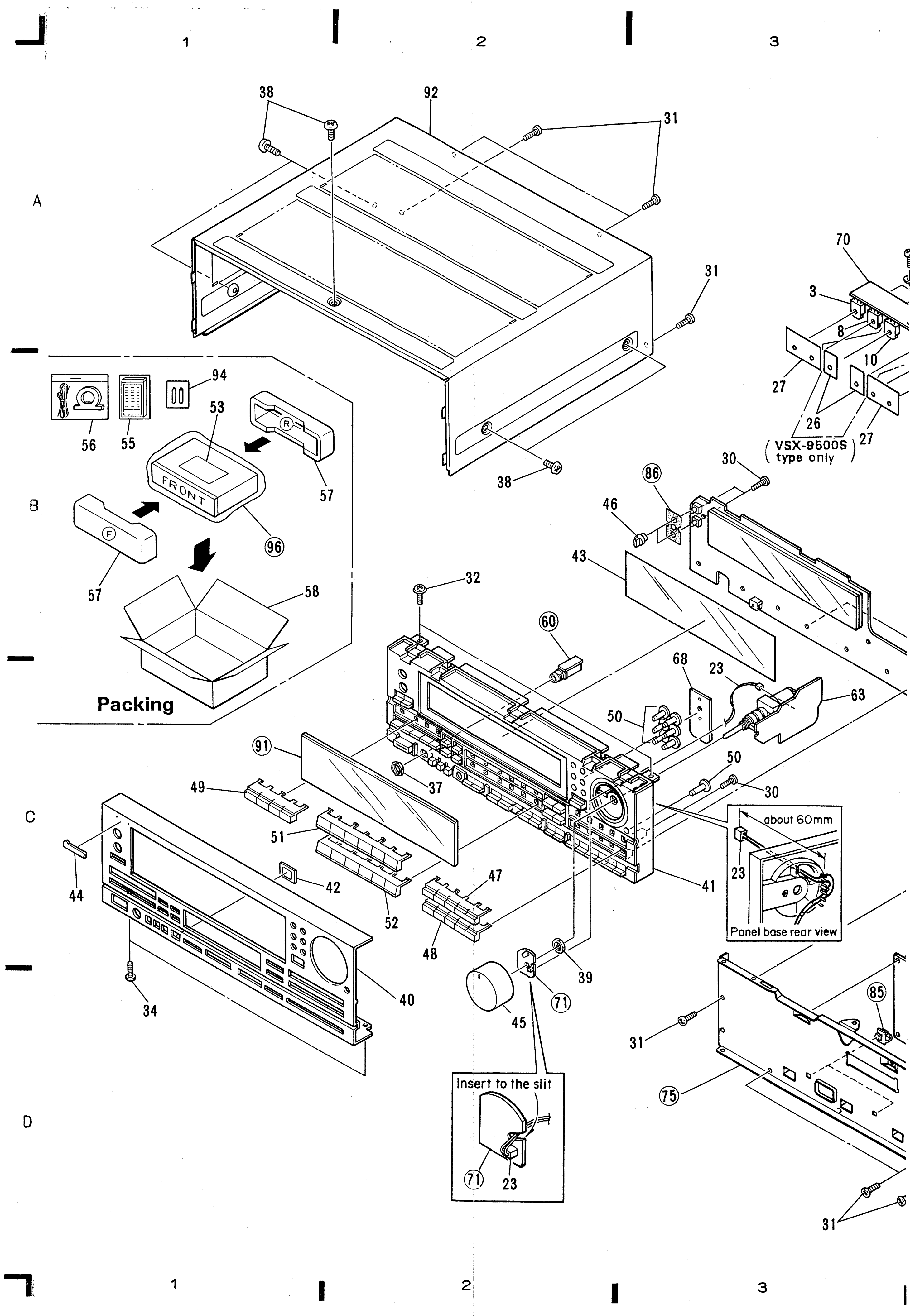
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

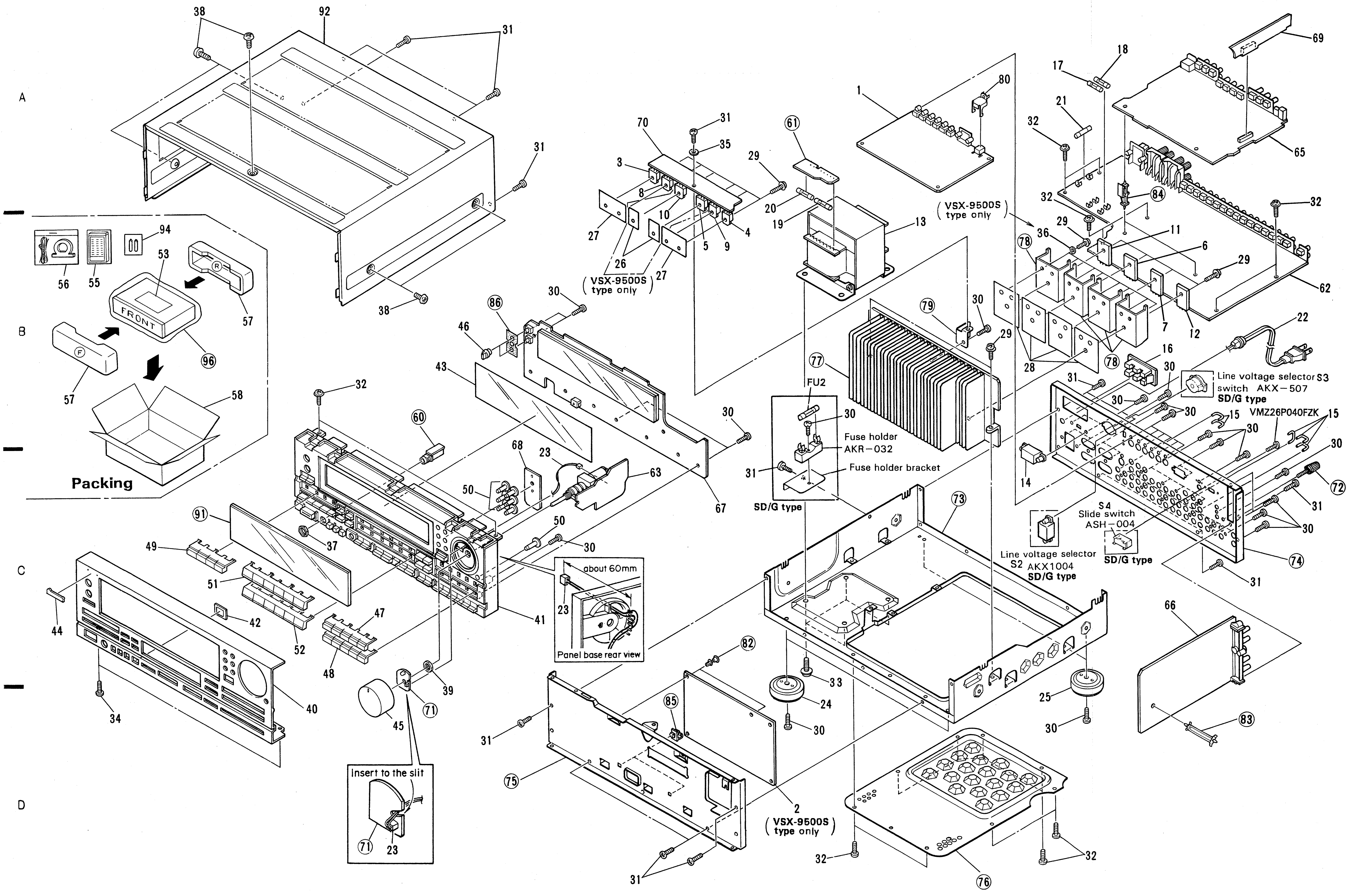
NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Mark	No.	Part No.	Description
	1	AWK1219	S TERM/CENTER SP ASSY
	2	AWX1025	PRO LOGIC ASSY
⚠	3	2SA1263N	TRANSISTOR Q 7
⚠	4	2SA1263N	TRANSISTOR Q 8
⚠	5	2SA1263N	TRANSISTOR Q 10
⚠	6	2SA1302	TRANSISTOR Q 3
⚠	7	2SA1302	TRANSISTOR Q 4
⚠	8	2SC3180N	TRANSISTOR Q 5
⚠	9	2SC3180N	TRANSISTOR Q 6
⚠	10	2SC3180N	TRANSISTOR Q 9
⚠	11	2SC3281	TRANSISTOR Q 1
⚠	12	2SC3281	TRANSISTOR Q 2
	13	ATS1205	POWER TRANSFORMER
⚠	14	AKX1004	VOLTAGE SELECTOR S 1
	15	AKM1019	JUMPER PLUG
⚠	16	AKP-515	AC SOCKET 3-P
⚠	17	AEK-109	FUSE(6A) FU 3
⚠	18	AEK-109	FUSE(6A) FU 4
⚠	19	AEK-120	FUSE(1.25A) FU 5
⚠	20	AEK-120	FUSE(1.25A) FU 6
⚠	21	AEK-310	FUSE(10A) FU 1
⚠	22	ADG1031	AC POWER CORD
	23	ADX1191	2P WIRE ASSY
	24	AMR1434	INSULATOR ASSY
	25	AMR1435	INSULATOR ASSY
	26	AEC-818	MICA SHEET
	27	AEC1140	MICA SHEET
	28	AEE1033	MICA SHEET
	29	ABA-297	SCREW
	30	ABA-298	SCREW
	31	ABA1009	SCREW
	32	ABA1011	SCREW
	33	ABA1034	SCREW
	34	ABA1048	SCREW
	35	ABE-053	WASHER
	36	ABF1018	BUSH
	37	ABN-065	NUT
	38	FBT40P080FZK	SCREW
	39	NK90FUC	NUT
	40	ANB1302	FRONT PANEL
	41	AMB1494	BASE
	42	AAK1783	FILTER
	43	AAK1513	PVC FILTER
	44	AAM1029	NAME PLATE (METAL)
	45	AAB1056	ROTARY KNOB
	46	AAB1078	ROTARY KNOB S
	47	AAD1394	HINGE KNOB
	48	AAD1395	HINGE KNOB
	49	AAD1396	HINGE KNOB
	50	AAD1398	TACT KNOB
	51	AAD1570	FUNCTION KNOB
	52	AAD1571	FUNCTION KNOB
	53	ARB1173	OPERATING INSTRUCTIONS
	54		....
	55	AXD1100	REMOTE CONSOLE UNIT
	56	AEA1007	ANTENNA KIT
	57	AHA1164	PAD
	58	AHD1620	PACKING CASE
	59	....	....
	60		HEADPHONE ASSY
	61		FUSE ASSY
	62	AWZ2507	AF ASSY
	63	AWZ2509	MOTOR-VOL
	64	....	....
	65	AWZ2511	VIDEO/SUR/CONTROL ASSY
	66	AWZ2512	TUNER ASSY
	67	AWZ2513	FRONT CONTROL A ASSY
	68	AWZ2514	FRONT CONTROL B ASSY
	69	AWZ2515	METER AMP ASSY
	70	AWZ2516	REAR AMP ASSY
	71		VOL IND ASSY
	72		TERMINAL SCREW
	73		CHASSIS
	74		REAR PANEL
	75		PANEL STAY
	76		BOTTOM PLATE
	77		HEAT SINK
	78		SUB HEAT SINK
	79		PCB SUPORT
	80		JACK HOLDER
	81		....
	82		PIN GROMMET
	83		PCB SUPORT
	84		PCB HOLDER
	85		PCB SUPORT
	86		BLIND SHEET
	87		....
	88		....
	89		....
	90		....
	91		ACRYLIC PANEL
	92	AZN1804	BONNET CASE
	93		....
	94		AM4 BATTERY(1.5V)
	95		....
	96		SHEET

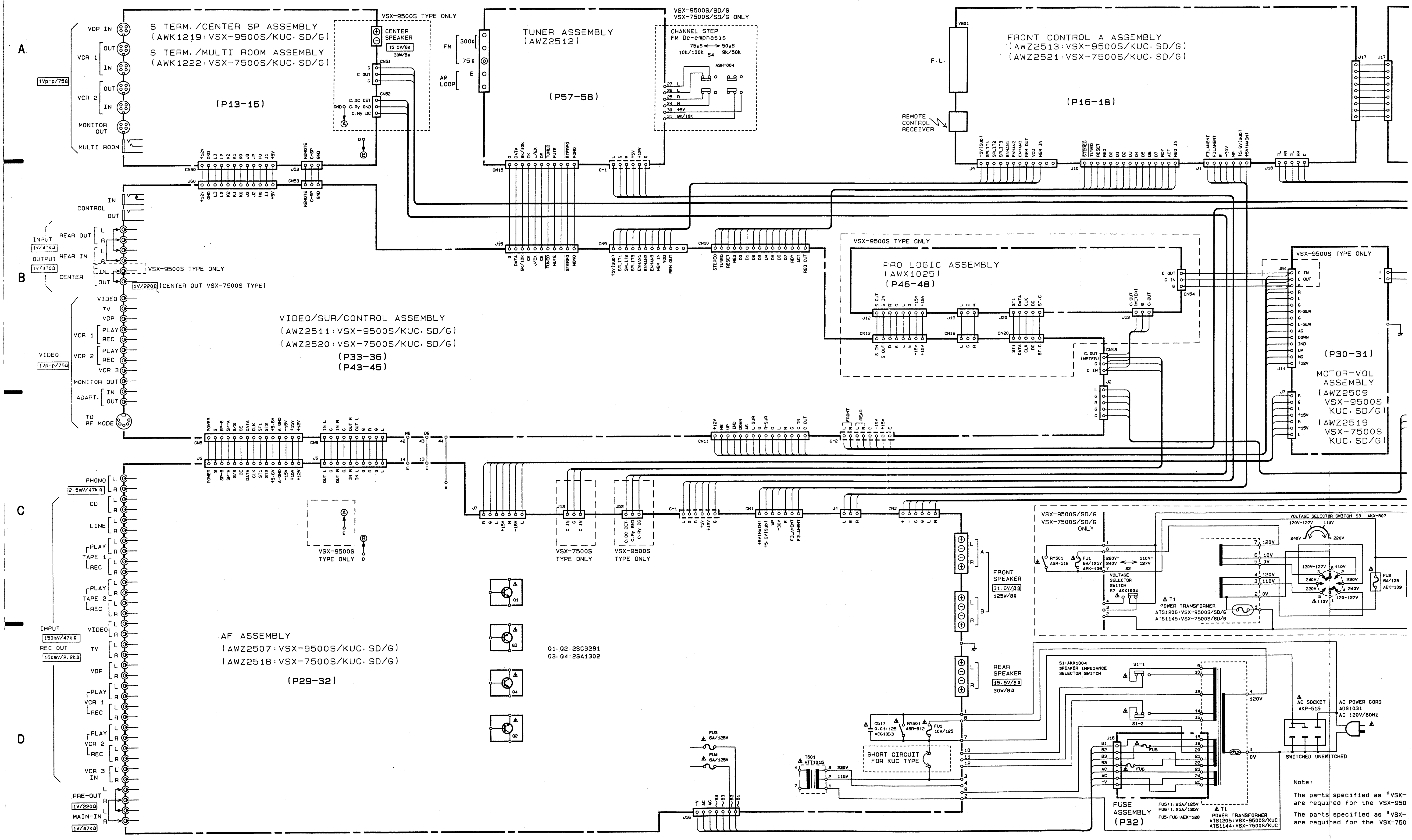


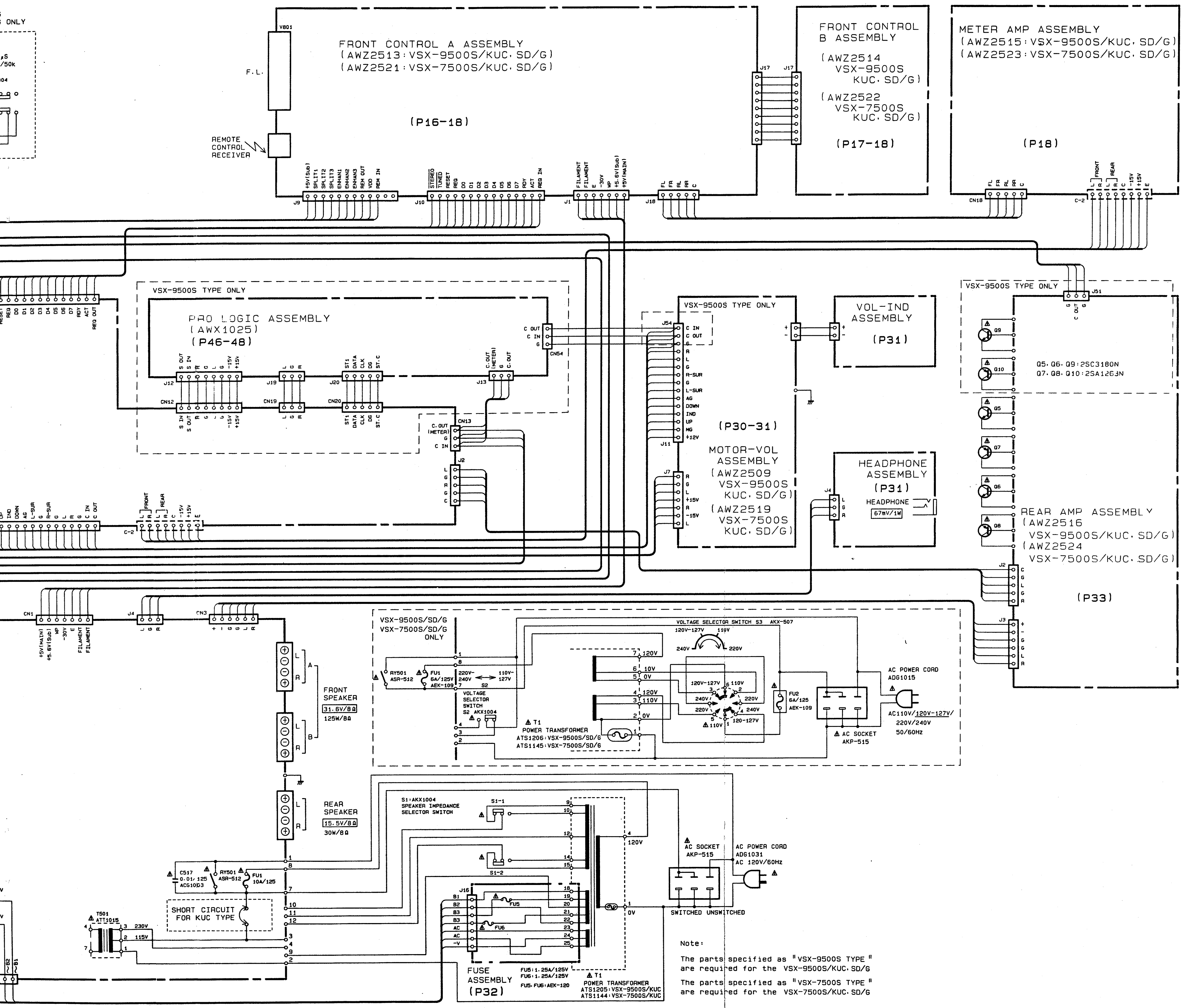
ONS
IT
ASSY
SSY
SSY


1
2
3
4
5
6
A
B
C
D
Packing
FRONT
R
F
38
92
31
70
35
29
61
1
80
17
18
69
21
32
65
84
62
8
10
9
27
26
(VSX-9500S type only)
20
19
13
(VSX-9500S type only)
36
78
11
6
29
7
12
28
22
16
86
30
46
43
79
77
FU2
Fuse holder
AKR−032
Fuse holder bracket
SD/G type
Line voltage selector S3
switch AKX−507
SD/G type
VMZ26P040FZK
15
14
72
74
S4
Slide switch
ASH−004
SD/G type
Line voltage selector
S2 AKX1004
SD/G type
73
60
68
23
63
50
67
91
37
49
51
42
47
52
48
44
40
34
45
71
39
41
about 60mm
Panel base rear view
82
85
24
33
25
66
83
75
2
(VSX-9500S type only)
76
Insert to the slit
94
53
56
55
57
96
58

3. SCHEMATIC DIAGRAMS AND P.C.BOARDS CONNECTION DIAGRMS

3.1 OVER ALL SCHEMATIC DIAGRAM


A
B
C
D
S TERM./CENTER SP ASSEMBLY
(AWK1219:VSX-9500S/KUC, SD/G)
S TERM./MULTI ROOM ASSEMBLY
(AWK1222:VSX-7500S/KUC, SD/G)
(P13-15)
VSX-9500S TYPE ONLY
CENTER SPEAKER
15.5V/8Ω
30W/8Ω
VDP IN
VCR 1
VCR 2
OUT
IN
MONITOR OUT
MULTI ROOM
1Vp-p/75Ω
TUNER ASSEMBLY
(AWZ2512)
(P57-58)
FM
300Ω
75Ω
AM LOOP
VSX-9500S/SD/G
VSX-7500S/SD/G ONLY
CHANNEL STEP
FM De-emphasis
75μS ←→ 50μS
10k/100k S4 9k/50k
ASH-004
FRONT CONTROL A ASSEMBLY
(AWZ2513:VSX-9500S/KUC, SD/G)
(AWZ2521:VSX-7500S/KUC, SD/G)
(P16-18)
V801
F.L.
REMOTE CONTROL RECEIVER
CONTROL
IN
OUT
INPUT
1V/47kΩ
OUTPUT
1V/220Ω
REAR OUT
REAR IN
CENTER
VSX-9500S TYPE ONLY
1V/220Ω (CENTER OUT VSX-7500S TYPE)
VIDEO
TV
VDP
PLAY
REC
VCR 3
MONITOR OUT
ADAPT.
TO RF MODE
VIDEO/SUR/CONTROL ASSEMBLY
(AWZ2511:VSX-9500S/KUC, SD/G)
(AWZ2520:VSX-7500S/KUC, SD/G)
(P33-36)
(P43-45)
VSX-9500S TYPE ONLY
PRO LOGIC ASSEMBLY
(AWX1025)
(P46-48)
VSX-9500S TYPE ONLY
(P30-31)
MOTOR-VOL ASSEMBLY
(AWZ2509 VSX-9500S KUC, SD/G)
(AWZ2519 VSX-7500S KUC, SD/G)
PHONO
2.5mV/47kΩ
CD
LINE
TAPE 1
TAPE 2
INPUT
150mV/47kΩ
REC OUT
150mV/2.2kΩ
VIDEO
TV
VDP
PRE-OUT
1V/220Ω
MAIN-IN
1V/47kΩ
VSX-9500S TYPE ONLY
VSX-7500S TYPE ONLY
VSX-9500S TYPE ONLY
AF ASSEMBLY
(AWZ2507:VSX-9500S/KUC, SD/G)
(AWZ2518:VSX-7500S/KUC, SD/G)
(P29-32)
Q1, Q2: 2SC3281
Q3, Q4: 2SA1302
Q1
Q3
Q4
Q2
FRONT SPEAKER
31.6V/8Ω
125W/8Ω
REAR SPEAKER
15.5V/8Ω
30W/8Ω
VSX-9500S/SD/G
VSX-7500S/SD/G
ONLY
VOLTAGE SELECTOR SWITCH S3 AKX-507
RY501 ASR-512
FU1 6A/125V AEK-109
VOLTAGE SELECTOR SWITCH S2 AKX1004
T1 POWER TRANSFORMER
ATS1206:VSX-9500S/SD/G
ATS1145:VSX-7500S/SD/G
FU2 6A/125 AEK-109
S1:AKX1004 SPEAKER IMPEDANCE SELECTOR SWITCH
C517 0.01/125 ACG1053
RY501 ASR-512
FU1 10A/125
SHORT CIRCUIT FOR KUC TYPE
T501 ATT1015
FU3 6A/125V
FU4 6A/125V
FUSE ASSEMBLY
(P32)
FU5:1.25A/125V
FU6:1.25A/125V
FU5, FU6:AEK-120
T1 POWER TRANSFORMER
ATS1205:VSX-9500S/KUC
ATS1144:VSX-7500S/KUC
AC SOCKET AKP-515
AC POWER CORD ADG1031
AC 120V/60Hz
SWITCHED UNSWITCHED
Note:
The parts specified as "VSX-
are required for the VSX-950
The parts specified as "VSX-
are required for the VSX-750


4
5
6
7
8
9
FRONT CONTROL A ASSEMBLY
(AWZ2513:VSX-9500S/KUC, SD/G)
(AWZ2521:VSX-7500S/KUC, SD/G)
(P16-18)
F.L.
REMOTE CONTROL RECEIVER
FRONT CONTROL B ASSEMBLY
(AWZ2514 VSX-9500S KUC, SD/G)
(AWZ2522 VSX-7500S KUC, SD/G)
(P17-18)
METER AMP ASSEMBLY
(AWZ2515:VSX-9500S/KUC, SD/G)
(AWZ2523:VSX-7500S/KUC, SD/G)
(P18)
VSX-9500S TYPE ONLY
PRO LOGIC ASSEMBLY
(AWX1025)
(P46-48)
MOTOR-VOL ASSEMBLY
(AWZ2509 VSX-9500S KUC, SD/G)
(AWZ2519 VSX-7500S KUC, SD/G)
(P30-31)
VOL-IND ASSEMBLY
(P31)
HEADPHONE ASSEMBLY
(P31)
HEADPHONE
67mV/1W
Q5, Q6, Q9:2SC3180N
Q7, Q8, Q10:2SA1263N
REAR AMP ASSEMBLY
(AWZ2516 VSX-9500S/KUC, SD/G)
(AWZ2524 VSX-7500S/KUC, SD/G)
(P33)
FRONT SPEAKER
31.6V/8Ω
125W/8Ω
REAR SPEAKER
15.5V/8Ω
30W/8Ω
VSX-9500S/SD/G
VSX-7500S/SD/G
ONLY
VOLTAGE SELECTOR SWITCH S3 AKX-507
RY501 ASR-512
FU1 6A/125V AEK-109
VOLTAGE SELECTOR SWITCH S2 AKX1004
T1 POWER TRANSFORMER
ATS1206:VSX-9500S/SD/G
ATS1145:VSX-7500S/SD/G
FU2 6A/125 AEK-109
AC POWER CORD ADG1015
AC SOCKET AKP-515
AC110V/120V-127V/220V/240V 50/60Hz
S1:AKX1004 SPEAKER IMPEDANCE SELECTOR SWITCH
C517 0.01/125 ACG1003
RY501 ASR-512
FU1 10A/125
SHORT CIRCUIT FOR KUC TYPE
T501 ATT1015
AC SOCKET AKP-515
AC POWER CORD ADG1031
AC 120V/60Hz
SWITCHED UNSWITCHED
FUSE ASSEMBLY
(P32)
FU5:1.25A/125V
FU6:1.25A/125V
FU5-FU6:AEK-120
T1 POWER TRANSFORMER
ATS1205:VSX-9500S/KUC
ATS1144:VSX-7500S/KUC

Note:

The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G

1.RESISTORS:

Indicated in Ω,1/4W,1/8W,±5% tolerance unless othervise noted

k:kΩ,M:MΩ,(F):±1%,(G):±2%,(K):±10%(M),±20% tolerance

2.CAPACITORS:

Indicated in capacity (μF)/voltage(V) unless othervise noted p:pF

Indication vithout voltage is 50V except electrolytic capacitor.

3.VOLTAGE,CURRENT:

☐:Signal voltage at 125W+125W(Front),30W+30W(Rear),
8ohm output(1kHz)

☐:DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.

⇦ mA:DC current at no input signal

4.OTHERS:

➡ :Signal route.

⊘ :Adjusting point.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore,when replacing,be sure to use parts of identical designation.

※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram,but the actual circuit may vary due to improvements in design.

5.SWITCH

S1:SPEAKER IMPEDANCE SELECTOR
8Ω or more⇔4Ω to less than 8Ω

S2:Voltage Selector (SD/G model only)
220~240V⇔110~127V

S3:Voltage Selector (SD/G model only)
110V,120~127V,220V,240V

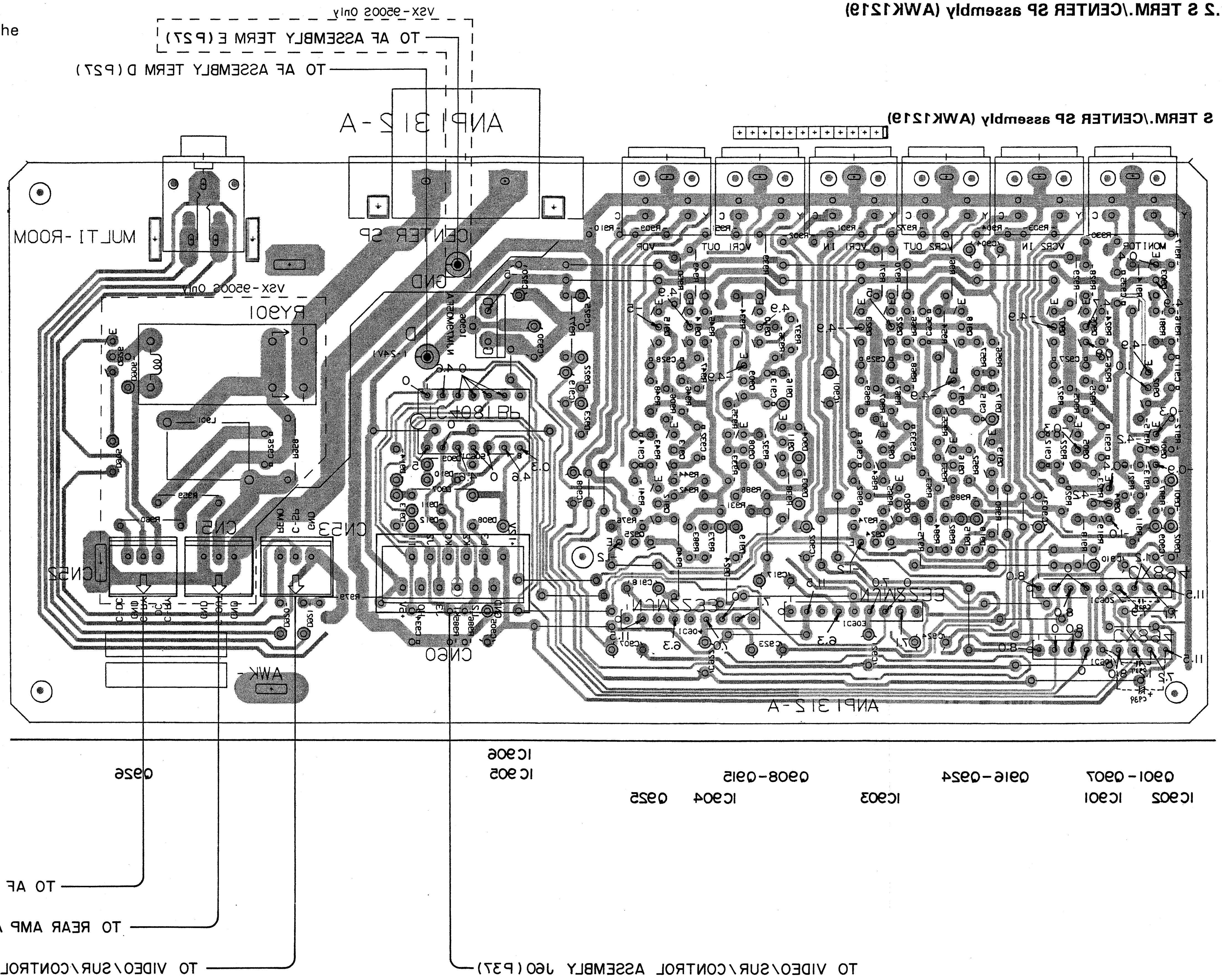
S4:CHANNEL STEP/FM DE-EMPHASIS (SD/G model only)
75μS⇔50μS
10kHz/100kHz⇔9kHz/50kHz

S801:TUNING UP
S802:TUNIG DOWN
S803:ST 1
S804:ST 2
S805:ST 3
S806:ST 4
S807:ST 5
S808:FM
S809:AM
S810:ST 6
S811:ST 7
S812:ST 8
S813:ST 9
S814:ST 10
S815:RETURN
S816:AUTO/MANUAL
S817:DIRECT
S818:FM MODE
S819:MEMORY
S820:MEMORY SCAN
S821:NAME
S822:HITS
S823:REAR UP
S824:REAR DOWN
S825:SIMULATED STEREO
S826:VIDEO SIGNAL SELECTOR
S827:VCR 1
S828:VCR 2
S829:VDP/CDV
S830:TV
S831:L
S832:R
S833:MUTE
S834:TAPE 2/DAT 2
S835:TAPE 1/DAT 1
S836:CD
S837:TUNER
S838:PHONO
S839:TREBLE UP
S840:TREBLE DOWN
S841:ACOUSTIC MEMORY
S842:ACOUSTIC SELECT
S843:DELAY TIME
S845:STADIUM
S846:SIMULATED
S847:BASS UP
S848:BASS DOWN
S849:VCR NOISE FILTER
S850:ENHANCER
S851:SURROUND OFF
S852:TV ANT
S853:POWER STANDBY
S854:SURROUND TEST TONE(VSX-9500S only)
S855:CENTER MODE (VSX-9500S only)
S856:VIDEO
S857:SP-A
S858:SP-B
S859:VCR 1 REC SELECTOR
S860:VIDEO ADAPTOR
S861:VCR 1 MODE
S862:VCR 1 REC ENHANCER
S863:SP-REAR
S864:VCR 3
S865:LINE
S866:CENTER UP (VSX-9500S only)
S867:CENTER DOWN (VSX-9500S only)

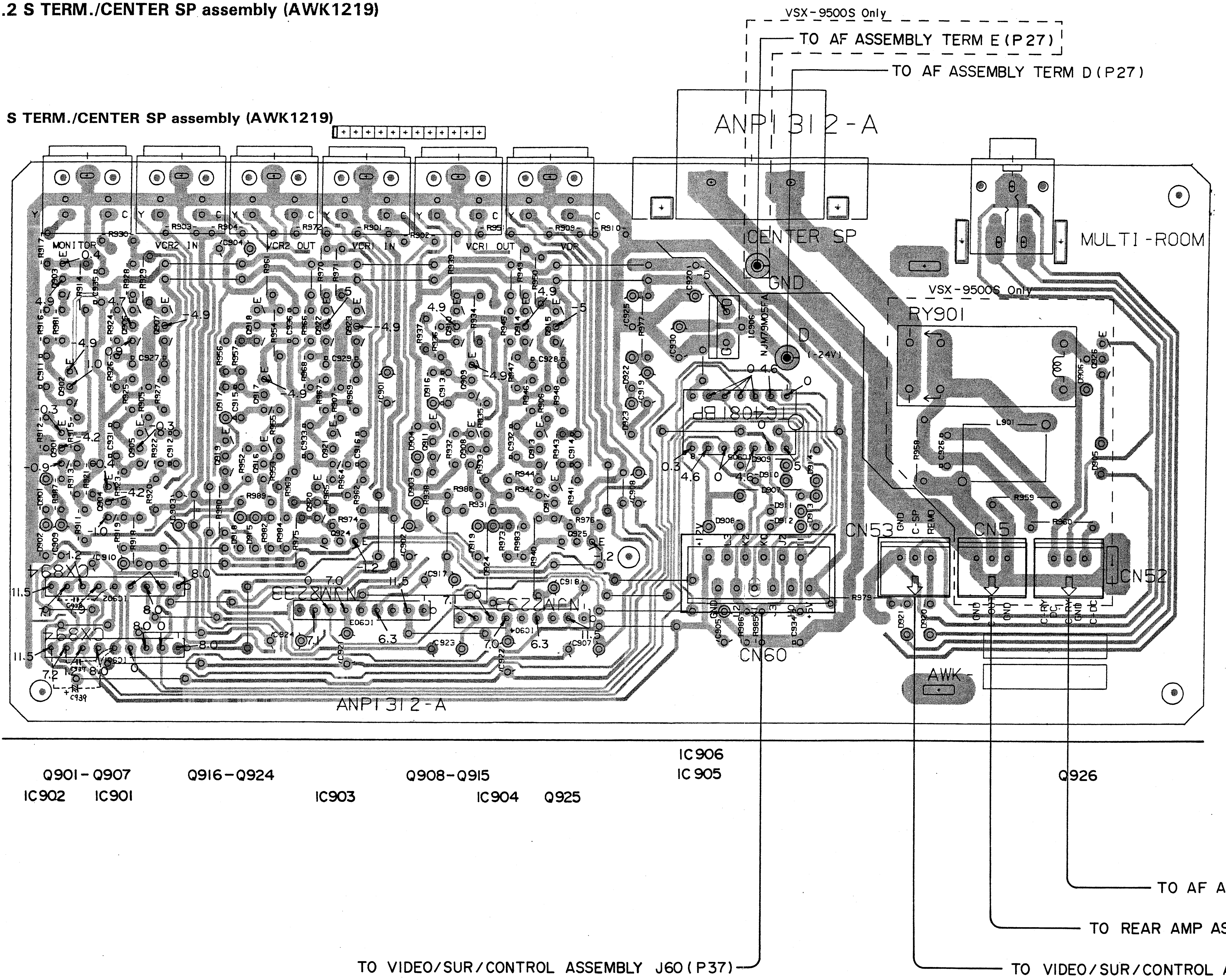
THE UNDERLINED INDICATES THE SWITCH POSITION

3.2 S TERM./CENTER SP assembly (AWK1219)

NOTE:
This picture shows the foil side of the printed circuit.


VSX-9500S Only
TO AF ASSEMBLY TERM E (P27)
TO AF ASSEMBLY TERM D (P27)
ANP1312-A
S TERM./CENTER SP assembly (AWK1219)
MULTI-ROOM
CENTER SP
GND
PY901
VSX-9500S Only
VDP
VCR1 OUT
VCR1 IN
VCR2 OUT
VCR2 IN
MONITOR
CN51
CN52
CN53
CN60
AWK-
Q926
IC906
IC905
Q908-Q915
Q916-Q924
Q901-Q907
IC902
IC901
IC903
IC904
Q925
TO AF ASSEMBLY J52 (P27)
TO REAR AMP ASSEMBLY J51 (P39)
TO VIDEO/SUR/CONTROL ASSEMBLY J53 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY J60 (P37)

3.2 S TERM./CENTER SP assembly (AWK1219)


VSX-9500S Only
TO AF ASSEMBLY TERM E (P27)
TO AF ASSEMBLY TERM D (P27)
S TERM./CENTER SP assembly (AWK1219)
ANP1312-A
CENTER SP
GND
D (-24V)
MULTI-ROOM
VSX-9500S Only
RY901
MONITOR
VCR2 IN
VCR2 OUT
VCR1 IN
VCR1 OUT
VDP
IC4081BP
NJM79M05A
L901
CN53
GND C-SP REMO
CN51
GND OUT GND
CN52
C-RY DC RY GND DC
CN60
GND 12 +5V
AWK-
ANP1312-A
Q901-Q907
IC902 IC901
Q916-Q924
IC903
Q908-Q915
IC904 Q925
IC906
IC905
Q926
TO VIDEO/SUR/CONTROL ASSEMBLY J60 (P37)
TO AF ASSEMBLY J52 (P27)
TO REAR AMP ASSEMBLY J51 (P39)
TO VIDEO/SUR/CONTROL ASSEMBLY J53 (P38)

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E○ Q504 ○ ○	E ○ ○ ○ or E ○ ○ ○	Transistor
Q215 ○ ○ ○	○ ○ ○ or ○ ○ ○	Radiator type transistor
◎ D203 ○	D203 ○—▶|—○	Diode
○ R237 ○	R237 ○—WW—○	Resistor
◎ C513 ○	○—|⊢+—○	Capacitor (Polarity)
○ C518 ○	○—||—○	Capacitor (Non-polarity)

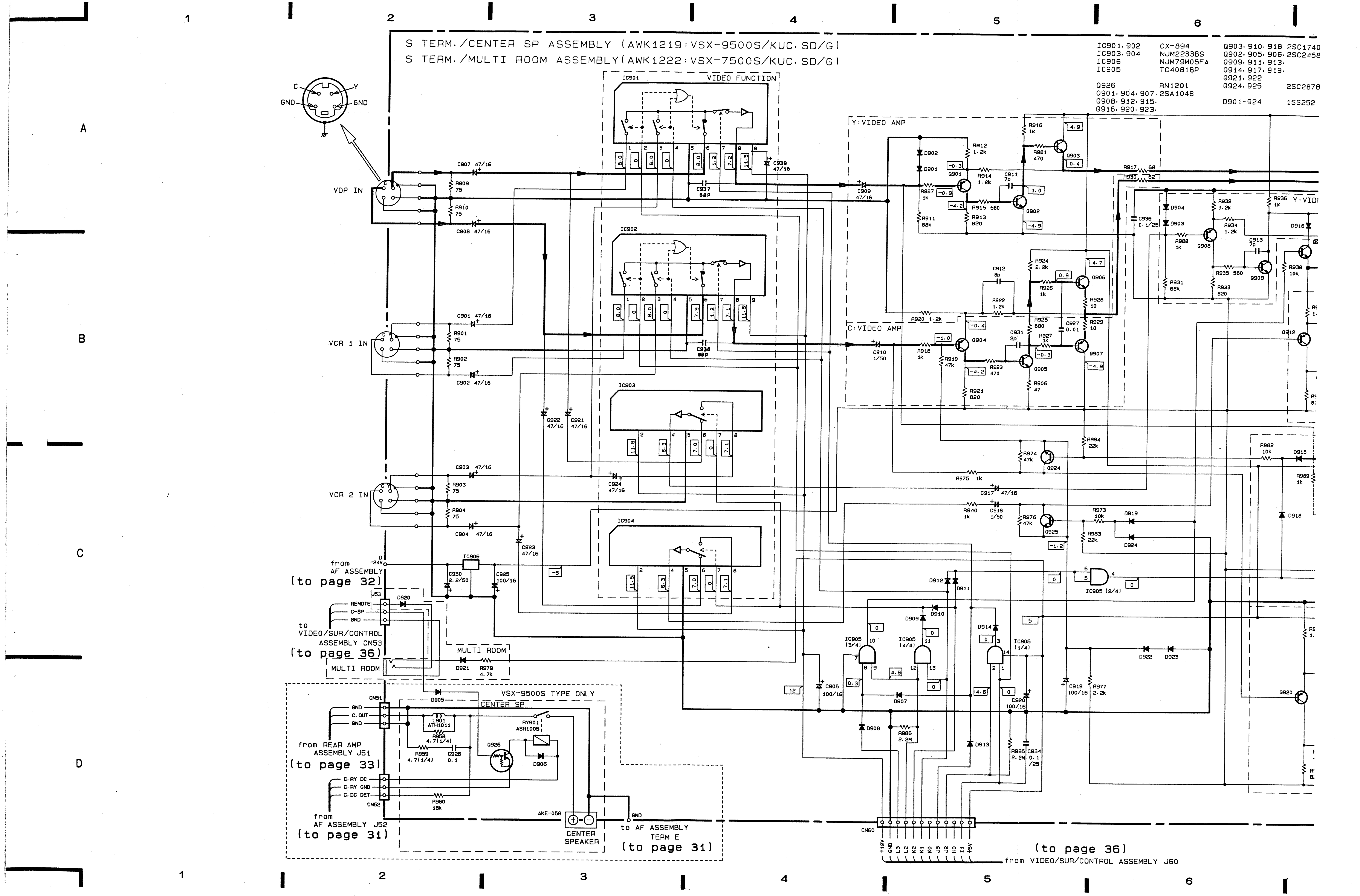
Others

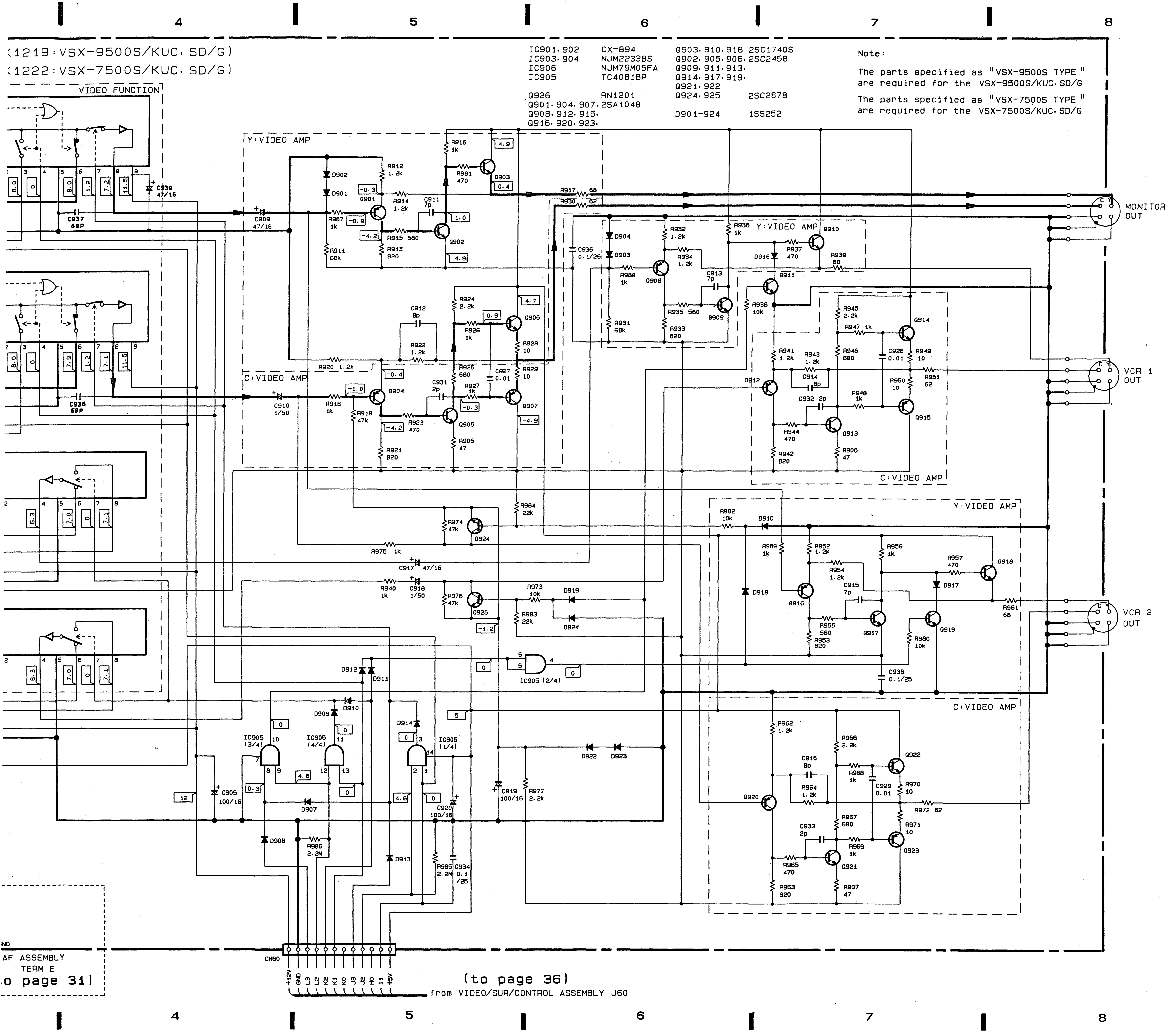
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

S TERM./CENTER SP ASSEMBLY (AWK1219: VSX-9500S/KUC, SD/G)
S TERM./MULTI ROOM ASSEMBLY (AWK1222: VSX-7500S/KUC, SD/G)

IC901, 902	CX-894	Q903, 910, 918	2SC1740
IC903, 904	NJM2233BS	Q902, 905, 906, Q909, 911, 913, Q914, 917, 919, Q921, 922	2SC2458
IC906	NJM79M05FA		
IC905	TC4081BP		
Q926	RN1201	Q924, 925	2SC2878
Q901, 904, 907, Q908, 912, 915, Q916, 920, 923,	2SA1048	D901-924	1SS252


1
2
3
4
5
6
A
B
C
D
C
Y
GND
GND
VDP IN
VCR 1 IN
VCR 2 IN
IC901
VIDEO FUNCTION
IC902
IC903
IC904
IC905 (2/4)
IC905 (3/4)
IC905 (4/4)
IC905 (1/4)
IC906
Y: VIDEO AMP
C: VIDEO AMP
C907 47/16
C908 47/16
C901 47/16
C902 47/16
C903 47/16
C904 47/16
R909 75
R910 75
R901 75
R902 75
R903 75
R904 75
C937 68P
C938 68P
C939 47/16
C922 47/16
C921 47/16
C923 47/16
C924 47/16
C930 2.2/50
C925 100/16
C909 47/16
C910 1/50
D902
D901
Q901
Q902
Q903
Q904
Q905
Q906
Q907
Q908
Q909
Q912
Q920
Q924
Q925
Q926
R912 1.2k
R916 1k
R981 470
R914 1.2k
C911 7p
R987 1k
R915 560
R911 68k
R913 820
R917 68
R930 62
R936 1k
R924 2.2k
C912 8p
R926 1k
R928 10
R922 1.2k
R925 680
C927 0.01
R929 10
R920 1.2k
R918 1k
R919 47k
C931 2p
R927 1k
R923 470
R905 47
R921 820
R984 22k
R974 47k
R975 1k
C917 47/16
R940 1k
C918 1/50
R976 47k
R973 10k
R983 22k
D919
D924
D904
D903
R932 1.2k
R934 1.2k
R988 1k
C913 7p
R935 560
R938 10k
R931 68k
R933 820
C935 0.1/25
D916
R982 10k
D915
R989 1k
D918
D912
D911
D909
D910
D914
D922
D923
D907
D908
D913
R986 2.2M
R985 2.2M
C934 0.1 /25
C905 100/16
C920 100/16
C919 100/16
R977 2.2k
from AF ASSEMBLY
-24V
(to page 32)
J53
REMOTE
C-SP
GND
D920
to VIDEO/SUR/CONTROL ASSEMBLY CN53
(to page 36)
MULTI ROOM
D921
R979 4.7k
D905
VSX-9500S TYPE ONLY
CENTER SP
CN51
GND
C.OUT
GND
L901 ATH1011
R958 4.7(1/4)
R959 4.7(1/4)
C926 0.1
RY901 ASR1005
D906
from REAR AMP ASSEMBLY J51
(to page 33)
C.RY DC
C.RY GND
C.DC DET
CN52
R960 18k
from AF ASSEMBLY J52
(to page 31)
AKE-058
CENTER SPEAKER
GND
to AF ASSEMBLY TERM E
(to page 31)
CN60
+12V
GND
L3
L2
K2
K1
K0
J3
J2
H0
I1
+5V
(to page 36)
from VIDEO/SUR/CONTROL ASSEMBLY J60


4
5
6
7
8
1219 : VSX-9500S/KUC, SD/G)
1222 : VSX-7500S/KUC, SD/G)
VIDEO FUNCTION
Y: VIDEO AMP
C: VIDEO AMP
Y: VIDEO AMP
C: VIDEO AMP
Y: VIDEO AMP
C: VIDEO AMP
MONITOR OUT
VCR 1 OUT
VCR 2 OUT
C
Y
Q901
Q902
Q903
Q904
Q905
Q906
Q907
Q908
Q909
Q910
Q911
Q912
Q913
Q914
Q915
Q916
Q917
Q918
Q919
Q920
Q921
Q922
Q923
Q924
Q925
D901
D902
D903
D904
D907
D908
D909
D910
D911
D912
D913
D914
D915
D916
D917
D918
D919
D922
D923
D924
IC905 (2/4)
IC905 (3/4)
IC905 (4/4)
IC905 (1/4)
C905 100/16
C909 47/16
C910 1/50
C911 7p
C912 8p
C913 7p
C914 8p
C915 7p
C916 8p
C917 47/16
C918 1/50
C919 100/16
C920 100/16
C927 0.01
C928 0.01
C929 0.01
C931 2p
C932 2p
C933 2p
C934 0.1 /25
C935 0.1/25
C936 0.1/25
C937 68P
C938 68P
C939 47/16
R905 47
R906 47
R907 47
R911 68k
R912 1.2k
R913 820
R914 1.2k
R915 560
R916 1k
R917 68
R918 1k
R919 47k
R920 1.2k
R921 820
R922 1.2k
R923 470
R924 2.2k
R925 680
R926 1k
R927 1k
R928 10
R929 10
R930 62
R931 68k
R932 1.2k
R933 820
R934 1.2k
R935 560
R936 1k
R937 470
R938 10k
R939 68
R940 1k
R941 1.2k
R942 820
R943 1.2k
R944 470
R945 2.2k
R946 680
R947 1k
R948 1k
R949 10
R950 10
R951 62
R952 1.2k
R953 820
R954 1.2k
R955 560
R956 1k
R957 470
R961 68
R962 1.2k
R963 820
R964 1.2k
R965 470
R966 2.2k
R967 680
R968 1k
R969 1k
R970 10
R971 10
R972 62
R973 10k
R974 47k
R975 1k
R976 47k
R977 2.2k
R980 10k
R981 470
R982 10k
R983 22k
R984 22k
R985 2.2M
R986 2.2M
R987 1k
R988 1k
R989 1k
4.9
0.4
-0.3
-0.9
1.0
-4.2
-4.9
4.7
0.9
-0.4
-1.0
-0.3
-4.2
-4.9
-1.2
8.0
0
8.0
1.2
7.2
11.5
8.0
0
7.9
1.2
7.1
11.5
6.3
7.0
0
7.1
6.3
7.0
0
7.1
0
0
0
5
0
0
0.3
4.6
0
4.6
0
12
CN60
+12V
GND
L3
L2
K2
K1
K0
J3
J2
H0
I1
+5V
AF ASSEMBLY
TERM E
o page 31)
(to page 36)
from VIDEO/SUR/CONTROL ASSEMBLY J60
4
5
6
7
8
9
A
B
C
D

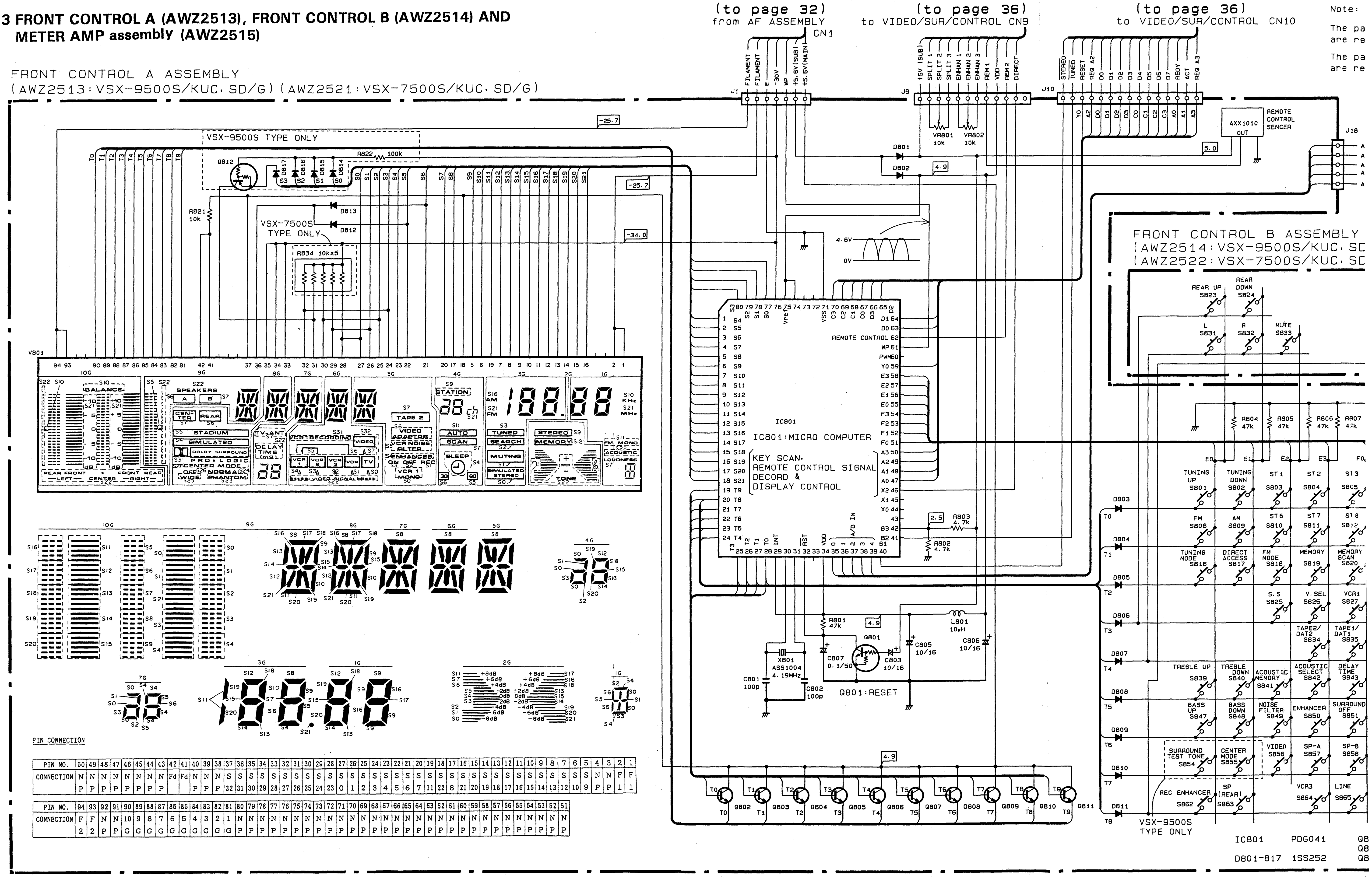
IC901, 902	CX-894	Q903, 910, 918	2SC1740S
IC903, 904	NJM2233BS	Q902, 905, 906,	2SC2458
IC906	NJM79M05FA	Q909, 911, 913,	
IC905	TC4081BP	Q914, 917, 919,	
		Q921, 922	
Q926	RN1201	Q924, 925	2SC2878
Q901, 904, 907,	2SA1048		
Q908, 912, 915,		D901-924	1SS252
Q916, 920, 923,			

Note:

The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G

3.3 FRONT CONTROL A (AWZ2513), FRONT CONTROL B (AWZ2514) AND METER AMP assembly (AWZ2515)


FRONT CONTROL A ASSEMBLY
(AWZ2513: VSX-9500S/KUC, SD/G) (AWZ2521: VSX-7500S/KUC, SD/G)
(to page 32)
from AF ASSEMBLY
CN1
(to page 36)
to VIDEO/SUR/CONTROL CN9
(to page 36)
to VIDEO/SUR/CONTROL CN10
Note:
The pa
are re
The pa
are re
J1
FILAMENT
FILAMENT
E
-30V
WP
+5.6V(SUB)
+5.6V(MAIN)
J9
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
J10
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REQ A3
VR801 10k
VR802 10k
REMOTE CONTROL SENCER
AXX1010
OUT
J18
-25.7
5.0
4.9
-34.0
VSX-9500S TYPE ONLY
Q812
D817
D816
D815
D814
R822 100k
R821 10k
D813
D812
VSX-7500S TYPE ONLY
R834 10kx5
D801
D802
4.6V
0V
V801
IC801
IC801: MICRO COMPUTER
KEY SCAN, REMOTE CONTROL SIGNAL DECORD & DISPLAY CONTROL
REMOTE CONTROL
R803 4.7k
R802 4.7k
2.5
R801 47k
X801 ASS1004 4.19MHz
C801 100p
C802 100p
C807 0.1/50
Q801
C803 10/16
C805 10/16
C806 10/16
L801 10μH
Q801: RESET
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
T0
T1
T2
T3
T4
T5
T6
T7
T8
T9
BALANCE
SPEAKERS
A
B
CENTER
REAR
STADIUM
SIMULATED
DOLBY SURROUND
PRO LOGIC
CENTER MODE
OFF
NORMAL
WIDE
PHANTOM
REAR FRONT
FRONT REAR
LEFT
CENTER
RIGHT
TV ANT
DELAY TIME (mS)
VCR RECORDING
VIDEO
VCR 1
VCR 2
VCR 3
VDP
TV
VIDEO SIGNAL
TAPE 2
VIDEO ADAPTOR
VCR NOISE FILTER
ENHANCER
ON
OFF
REC
VCR 1
MONO
STATION
ch
AUTO
SCAN
SLEEP
AM
FM
TUNED
SEARCH
MUTING
SIMULATED STEREO
STEREO
MEMORY
TONE
KHz
MHz
FM MONO
ACOUSTIC
LOUDNESS
+8dB
+6dB
+4dB
+2dB
0dB
-2dB
-4dB
-6dB
-8dB
FRONT CONTROL B ASSEMBLY
(AWZ2514: VSX-9500S/KUC, SD
(AWZ2522: VSX-7500S/KUC, SD
REAR UP S823
REAR DOWN S824
L S831
R S832
MUTE S833
R804 47k
R805 47k
R806 47k
R807 47k
E0
E1
E2
E3
TUNING UP S801
TUNING DOWN S802
ST1 S803
ST2 S804
ST3 S805
FM S808
AM S809
ST6 S810
ST7 S811
ST8 S812
TUNING MODE S816
DIRECT ACCESS S817
FM MODE S818
MEMORY S819
MEMORY SCAN S820
S.S S825
V.SEL S826
VCR1 S827
TAPE2/DAT2 S834
TAPE1/DAT1 S835
TREBLE UP S839
TREBLE DOWN S840
ACOUSTIC MEMORY S841
ACOUSTIC SELECT S842
DELAY TIME S843
BASS UP S847
BASS DOWN S848
NOISE FILTER S849
ENHANCER S850
SURROUND OFF S851
SURROUND TEST TONE S854
CENTER MODE S855
VIDEO S856
SP-A S857
SP-B S858
REC ENHANCER S862
SP (REAR) S863
VCR3 S864
LINE S865
D803
D804
D805
D806
D807
D808
D809
D810
D811
VSX-9500S TYPE ONLY
IC801 PDG041
D801-817 1SS252
Q8
Q8
Q8
1
2
3
4
5
6
A
B
C
D

PIN CONNECTION

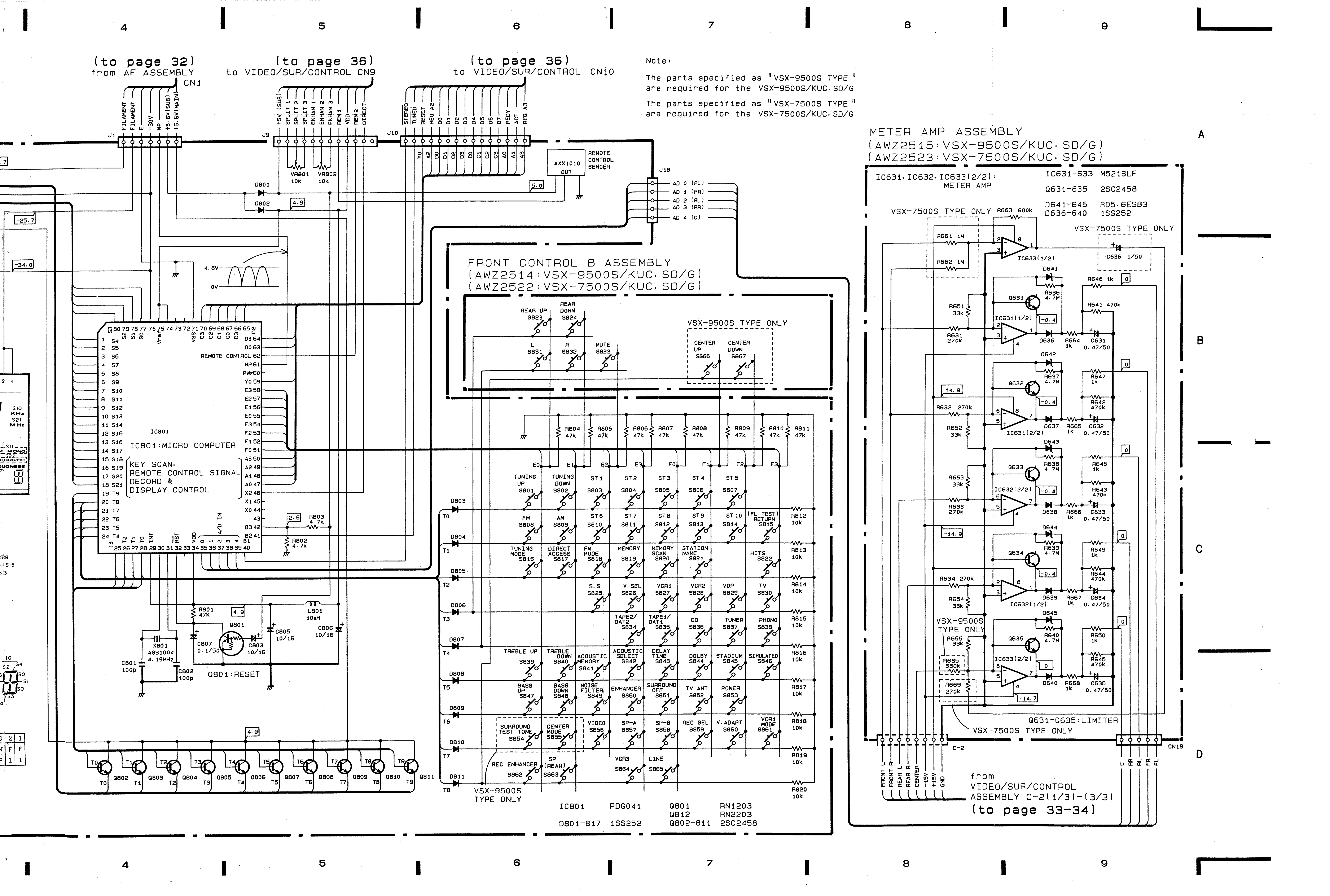
PIN NO.	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	N P	N P	N P	N P	N P	N P	N P	N P	Fd	Fd	N P	N P	N P	S 32	S 31	S 30	S 29	S 28	S 27	S 26	S 25	S 24	S 23	S 0	S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 11	S 22	S 8	S 21	S 20	S 19	S 18	S 17	S 16	S 15	S 14	S 13	S 12	S 10	S 9	N P	N P	F 1	F 1

PIN NO.	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51
CONNECTION	F 2	F 2	N P	N P	10 G	9 G	8 G	7 G	6 G	5 G	4 G	3 G	2 G	1 G	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P	N P

Note:

The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G


4
5
6
7
8
9
A
B
C
D
(to page 32)
from AF ASSEMBLY
CN1
(to page 36)
to VIDEO/SUR/CONTROL CN9
(to page 36)
to VIDEO/SUR/CONTROL CN10
J1
J9
J10
J18
FILAMENT
FILAMENT
E
-30V
WP
+5.6V(SUB)
+5.6V(MAIN)
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REQ A3
AXX1010
OUT
REMOTE CONTROL SENCER
VR801 10k
VR802 10k
D801
D802
5.0
4.9
AD 0 (FL)
AD 1 (FR)
AD 2 (RL)
AD 3 (RR)
AD 4 (C)
4.6V
0V
-25.7
-34.0
IC801
IC801: MICRO COMPUTER
KEY SCAN, REMOTE CONTROL SIGNAL DECORD & DISPLAY CONTROL
REMOTE CONTROL
R803 4.7k
R802 4.7k
2.5
R801 47k
Q801
Q801: RESET
X801 ASS1004 4.19MHz
C801 100p
C802 100p
C807 0.1/50
C803 10/16
C805 10/16
C806 10/16
L801 10μH
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
T0
T1
T2
T3
T4
T5
T6
T7
T8
T9
FRONT CONTROL B ASSEMBLY
(AWZ2514: VSX-9500S/KUC, SD/G)
(AWZ2522: VSX-7500S/KUC, SD/G)
REAR UP S823
REAR DOWN S824
L S831
R S832
MUTE S833
VSX-9500S TYPE ONLY
CENTER UP S866
CENTER DOWN S867
R804 47k
R805 47k
R806 47k
R807 47k
R808 47k
R809 47k
R810 47k
R811 47k
E0
E1
E2
E3
F0
F1
F2
F3
TUNING UP S801
TUNING DOWN S802
ST 1 S803
ST 2 S804
ST 3 S805
ST 4 S806
ST 5 S807
FM S808
AM S809
ST 6 S810
ST 7 S811
ST 8 S812
ST 9 S813
ST 10 S814
(FL TEST) RETURN S815
TUNING MODE S816
DIRECT ACCESS S817
FM MODE S818
MEMORY S819
MEMORY SCAN S820
STATION NAME S821
HITS S822
S.S S825
V. SEL S826
VCR1 S827
VCR2 S828
VDP S829
TV S830
TAPE2/DAT2 S834
TAPE1/DAT1 S835
CD S836
TUNER S837
PHONO S838
TREBLE UP S839
TREBLE DOWN S840
ACOUSTIC MEMORY S841
ACOUSTIC SELECT S842
DELAY TIME S843
DOLBY S844
STADIUM S845
SIMULATED S846
BASS UP S847
BASS DOWN S848
NOISE FILTER S849
ENHANCER S850
SURROUND OFF S851
TV ANT S852
POWER S853
SURROUND TEST TONE S854
CENTER MODE S855
VIDEO S856
SP-A S857
SP-B S858
REC SEL S859
V. ADAPT S860
VCR1 MODE S861
REC ENHANCER S862
SP (REAR) S863
VCR3 S864
LINE S865
VSX-9500S TYPE ONLY
D803
D804
D805
D806
D807
D808
D809
D810
D811
R812 10k
R813 10k
R814 10k
R815 10k
R816 10k
R817 10k
R818 10k
R819 10k
R820 10k
IC801 PDG041
Q801 RN1203
Q812 RN2203
Q802-811 2SC2458
D801-817 1SS252
METER AMP ASSEMBLY
(AWZ2515: VSX-9500S/KUC, SD/G)
(AWZ2523: VSX-7500S/KUC, SD/G)
IC631, IC632, IC633(2/2): METER AMP
IC631-633 M5218LF
Q631-635 2SC2458
D641-645 RD5.6ESB3
D636-640 1SS252
VSX-7500S TYPE ONLY
R663 680k
R661 1M
R662 1M
IC633(1/2)
C636 1/50
D641
R636 4.7M
Q631
R646 1k
R641 470k
R651 33k
IC631(1/2)
R631 270k
D636
R664 1k
C631 0.47/50
-0.4
D642
R637 4.7M
Q632
R647 1k
R642 470k
14.9
R632 270k
R652 33k
IC631(2/2)
D637
R665 1k
C632 0.47/50
D643
R638 4.7M
Q633
R648 1k
R643 470k
R653 33k
IC632(2/2)
R633 270k
D638
R666 1k
C633 0.47/50
-14.9
D644
R639 4.7M
Q634
R649 1k
R644 470k
R634 270k
R654 33k
IC632(1/2)
D639
R667 1k
C634 0.47/50
D645
VSX-9500S TYPE ONLY
R655 33k
R635 330k
R640 4.7M
Q635
R650 1k
R645 470k
IC633(2/2)
R669 270k
D640
R668 1k
C635 0.47/50
-14.7
Q631-Q635: LIMITER
VSX-7500S TYPE ONLY
C-2
CN18
FRONT L
FRONT R
REAR L
REAR R
CENTER
-15V
+15V
GND
C
RR
RL
FR
FL
from VIDEO/SUR/CONTROL ASSEMBLY C-2(1/3)-(3/3)
(to page 33-34)

NOTE

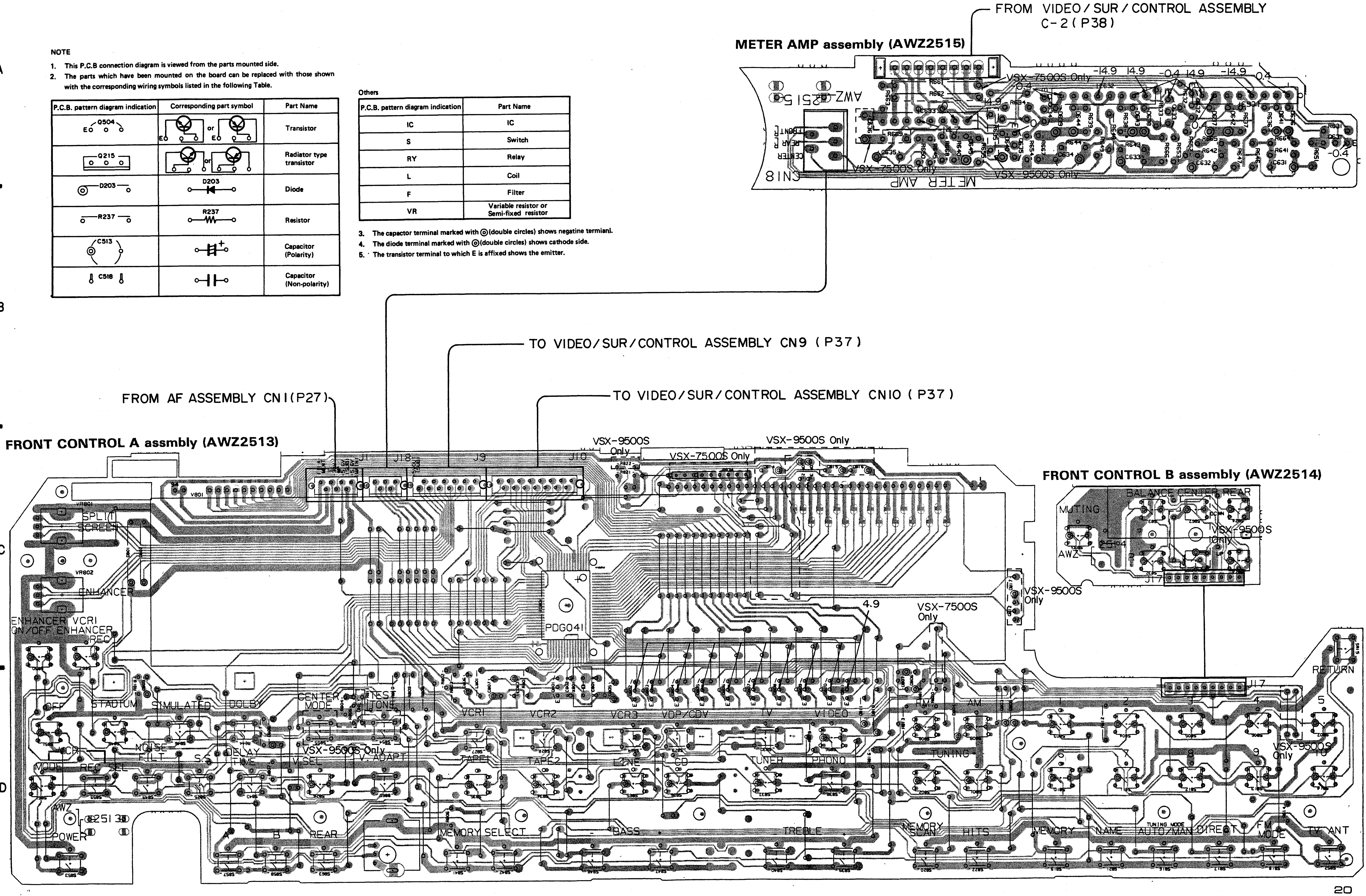
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

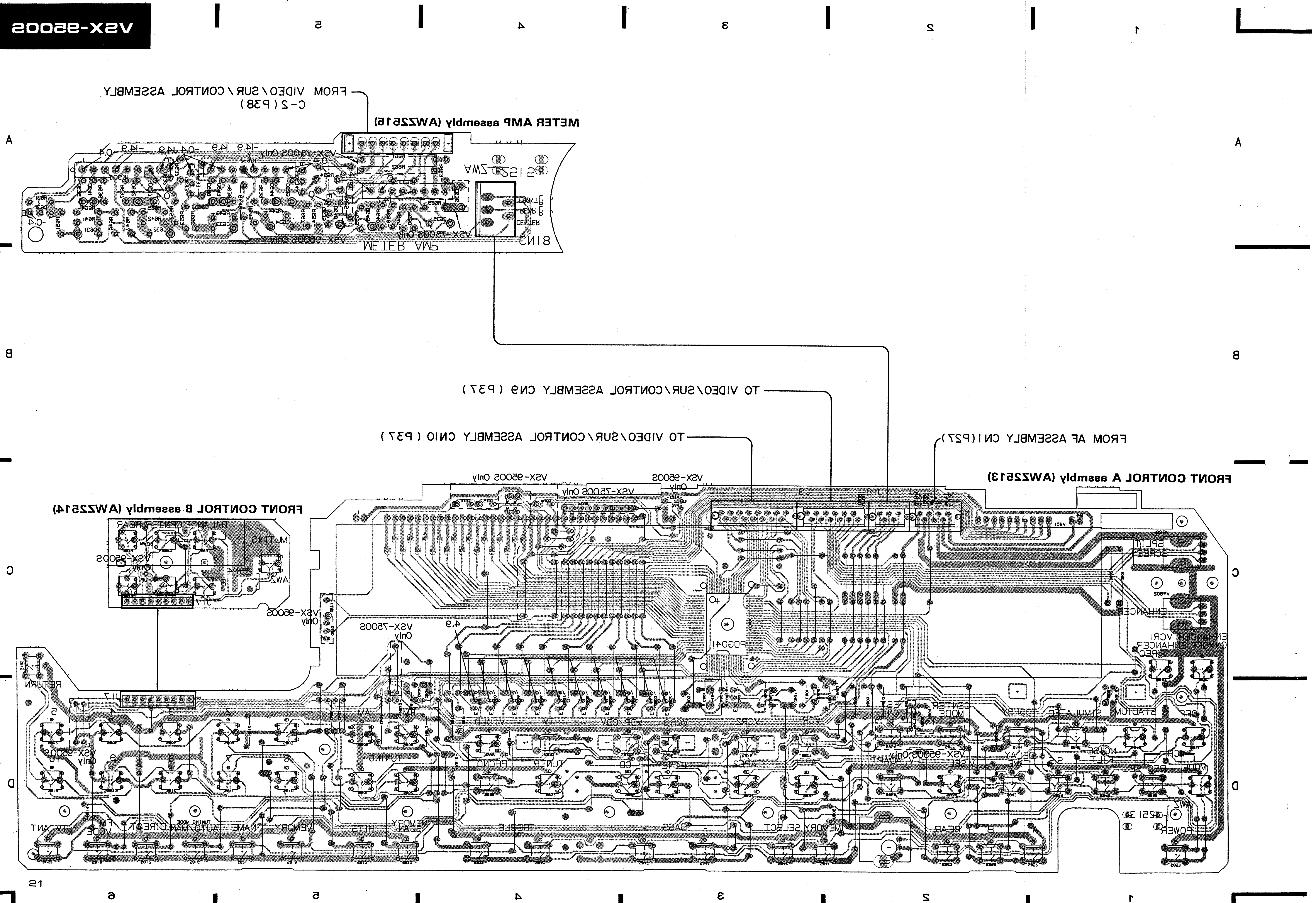
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

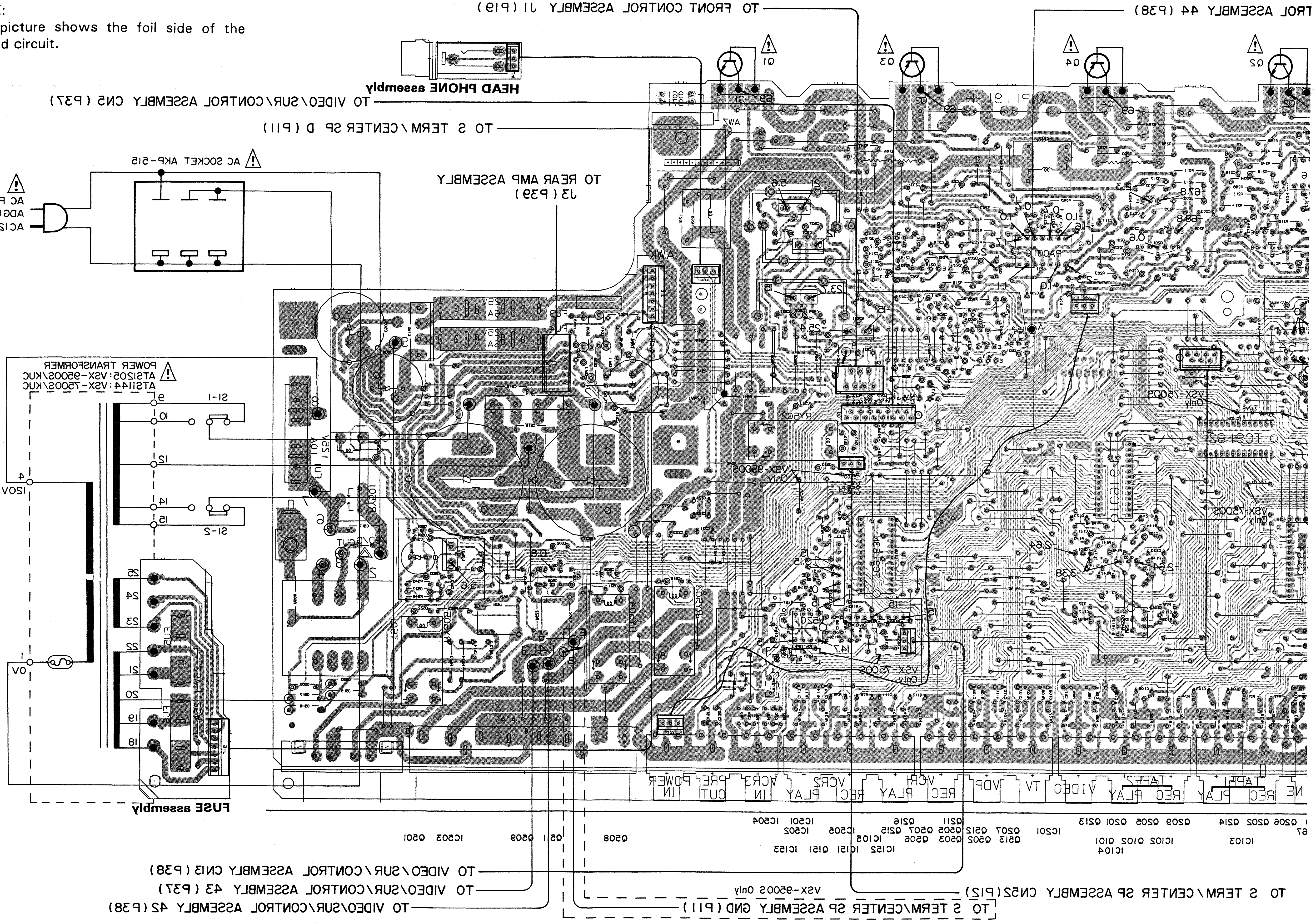
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

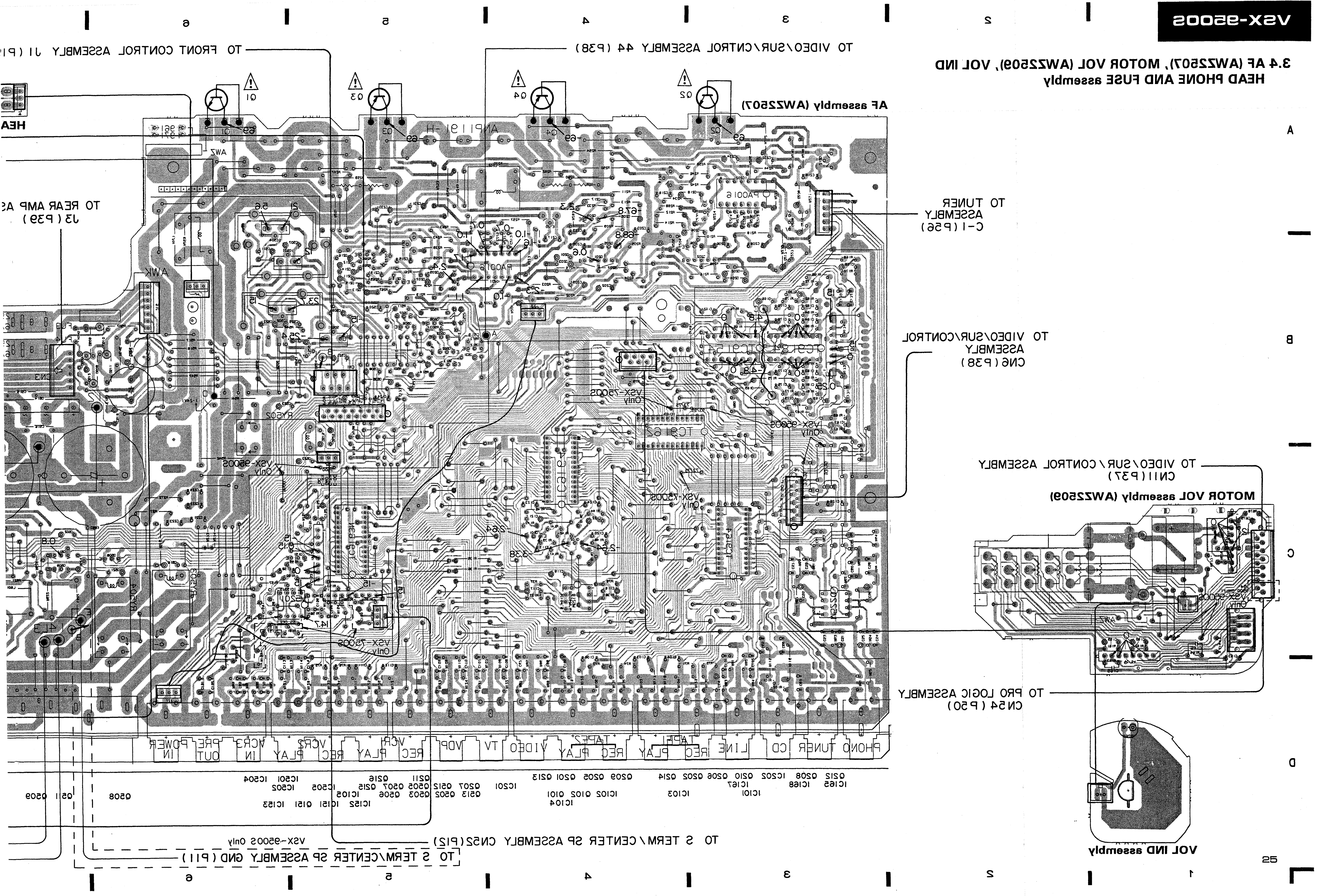

FROM VIDEO / SUR / CONTROL ASSEMBLY C-2 (P38)
METER AMP assembly (AWZ2515)
AWZ2515
CN18
CENTER
REAR
FRONT
VSX-7500S Only
VSX-9500S Only
METER AMP
-14.9
14.9
-0.4
0.4
R661
R662
R663
R664
R665
C535
C536
C631
C632
C633
C634
R631
R641
R642
R651
TO VIDEO / SUR / CONTROL ASSEMBLY CN9 (P37)
FROM AF ASSEMBLY CN1 (P27)
TO VIDEO / SUR / CONTROL ASSEMBLY CN10 (P37)
FRONT CONTROL A assmbly (AWZ2513)
J1
J18
J9
J10
V801
VR801
VR802
SPLIT SCREEN
ENHANCER
ENHANCER ON/OFF
VCR1 ENHANCER
REC
PDG041
4.9
VSX-9500S Only
VSX-7500S Only
OFF
STADIUM
SIMULATED
DOLBY
CENTER MODE
TEST TONE
VCR1
VCR2
VCR3
VDP/CDV
TV
VIDEO
FM
AM
1
2
3
4
5
6
7
8
9
10
VCR MODE
REC SEL
NOISE FILT
S.
DELAY TIME
V.SEL
V. ADAPT
TAPE1
TAPE2
LINE
CD
TUNER
PHONO
TUNING
RETURN
J17
AWZ2513
POWER
A
B
REAR
MEMORY SELECT
BASS
TREBLE
MEMORY SCAN
HITS
MEMORY
NAME
TUNING MODE AUTO/MAN
DIRECT
FM MODE
TV ANT
FRONT CONTROL B assembly (AWZ2514)
MUTING
BALANCE CENTER REAR
AWZ2514
VSX-9500S Only


6
5
4
3
2
1
A
B
C
D
FROM VIDEO/SUR/CONTROL ASSEMBLY C-2 (P38)
METER AMP assembly (AWZ2515)
METER AMP
CN18
FRONT
REAR
CENTER
VSX-7500S Only
VSX-9500S Only
-14.9
14.9
-0.4
0.4
TO VIDEO/SUR/CONTROL ASSEMBLY CN9 (P37)
TO VIDEO/SUR/CONTROL ASSEMBLY CN10 (P37)
FROM AF ASSEMBLY CN1 (P27)
FRONT CONTROL A assembly (AWZ2513)
FRONT CONTROL B assembly (AWZ2514)
BALANCE
CENTER
REAR
MUTING
VSX-9500S Only
J17
J10
J9
J18
J1
PDG041
4.9
RETURN
5
4
3
2
1
AM
FM
VIDEO
TV
VDP/CDV
VCR3
VCR2
VCR1
CENTER MODE
TEST TONE
DOLBY
SIMULATED
STADIUM
OFF
9
8
7
6
TUNING
PHONO
TUNER
CD
LINE
TAPE2
TAPE1
V. ADAPT
V.SEL
DELAY TIME
NOISE FILT
REC SEL
VCR
MODE
TV ANT
FM MODE
DIRECT
TUNING MODE
AUTO/MAN
NAME
MEMORY
HITS
MEMORY SCAN
TREBLE
BASS
MEMORY SELECT
REAR
B
POWER
SPLIT SCREEN
ENHANCER
ENHANCER VCR1 ON/OFF
ENHANCER REC

NOTE:
This picture shows the foil side of the printed circuit.


TO FRONT CONTROL ASSEMBLY J1 (P19)
TROL ASSEMBLY 44 (P38)
Q1
Q3
Q4
Q2
HEAD PHONE assembly
TO VIDEO/SUR/CONTROL ASSEMBLY CN5 (P37)
TO S TERM/CENTER SP D (P11)
AC SOCKET AKP-515
TO REAR AMP ASSEMBLY J3 (P39)
AC POWER CORD
ADG1031
AC120V/60Hz
POWER TRANSFORMER
ATS1205: VSX-9500S/KUC
ATS1144: VSX-7500S/KUC
S1-1
S1-2
9
10
12
14
15
4
120V
1
0V
25
24
23
22
21
20
19
18
FUSE assembly
ANP1191-H
VSX-7500S Only
VSX-9500S Only
POWER IN
PRE OUT
VCR3 IN
VCR2 PLAY REC
VCR1 PLAY REC
VDP
TV
VIDEO
TAPE2 PLAY REC
TAPE1 PLAY REC
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY 43 (P37)
TO VIDEO/SUR/CONTROL ASSEMBLY 42 (P38)
TO S TERM/CENTER SP ASSEMBLY CN52 (P12)
TO S TERM/CENTER SP ASSEMBLY GND (P11)
A
B
C
D
9
8
7
6
5
4

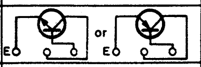
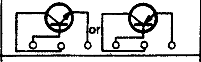
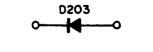
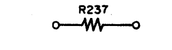
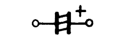
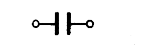
3.4 AF (AWZ2507), MOTOR VOL (AWZ2509), VOL IND HEAD PHONE AND FUSE assembly


TO FRONT CONTROL ASSEMBLY J1 (P1
HEA
TO VIDEO/SUR/CONTROL ASSEMBLY 44 (P38)
Q1
Q3
Q4
Q2
AF assembly (AWZ2507)
TO REAR AMP AS
J3 (P39)
TO TUNER ASSEMBLY C-1 (P56)
TO VIDEO/SUR/CONTROL ASSEMBLY CN6 (P38)
VSX-7500S Only
VSX-9500S Only
TO VIDEO/SUR/CONTROL ASSEMBLY CN11 (P37)
MOTOR VOL assembly (AWZ2509)
TO PRO LOGIC ASSEMBLY CN54 (P50)
PHONO
TUNER
CD
LINE
TAPE1 REC PLAY
TAPE2 REC PLAY
VIDEO
TV
VDP
VCR1 REC PLAY
VCR2 REC PLAY
VCR3 IN
PRE OUT
POWER IN
Q212 IC165
Q208 IC168
IC202
Q210 IC167 IC101
Q206 Q202 Q214
IC103
Q209 Q205 Q201 Q213
IC102 Q102 Q101 IC104
IC201
Q207 Q512 Q505 Q211 Q513 Q502 Q503
Q507 Q215 Q216 Q506
IC105 IC505
IC152 IC151 Q151 IC153
IC501 IC502 IC504
Q508
Q511 Q509
TO S TERM/CENTER SP ASSEMBLY CN52 (P12)
VSX-9500S Only
TO S TERM/CENTER SP ASSEMBLY GND (P11)
VOL IND assembly
A
B
C
D
1
2
3
4
5
6

3.4 AF (AWZ2507), MOTOR VOL (AWZ2509), VOL IND HEAD PHONE AND FUSE assembly

NOTE

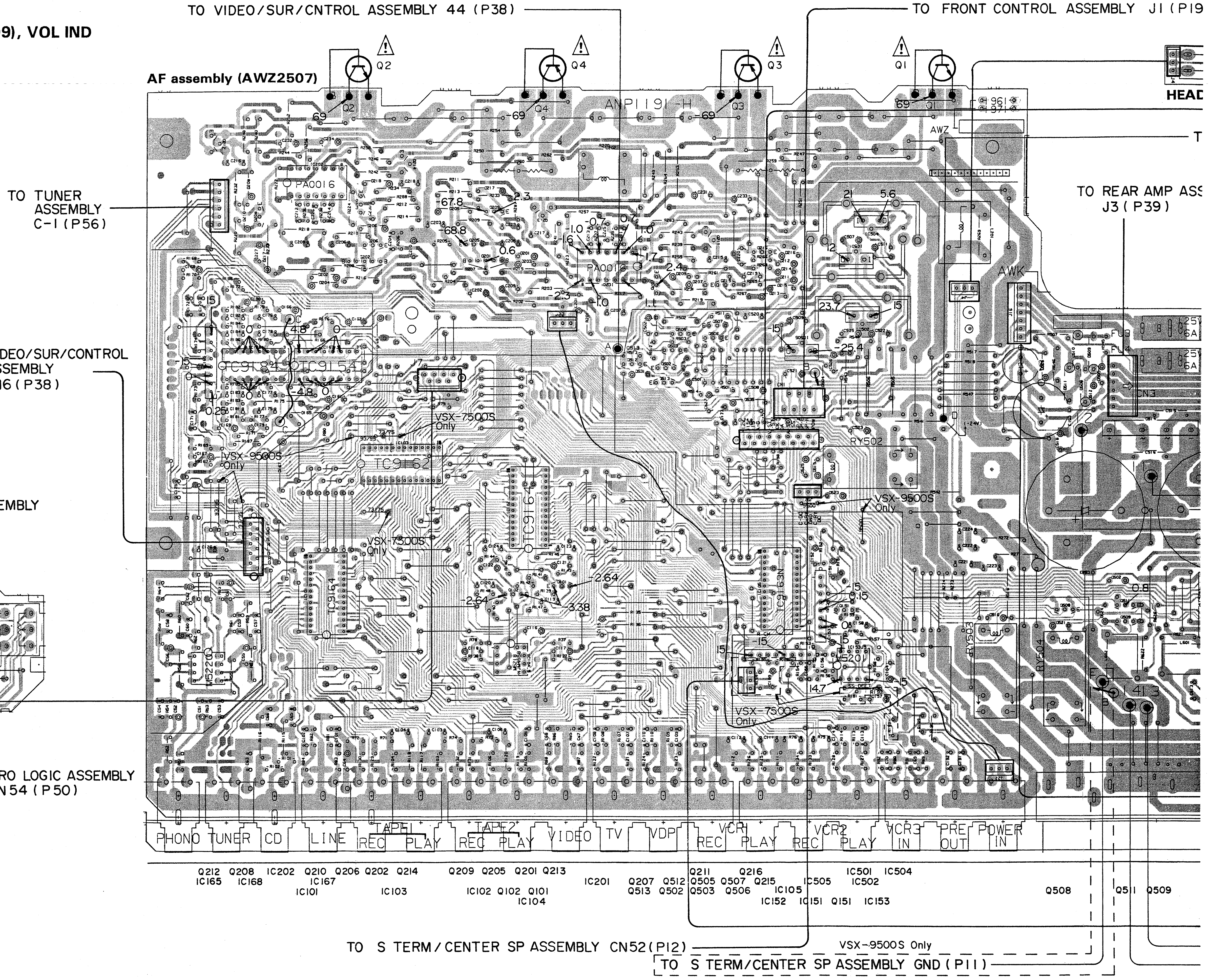
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504		Transistor
Q215		Radiator type transistor
D203		Diode
R237		Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

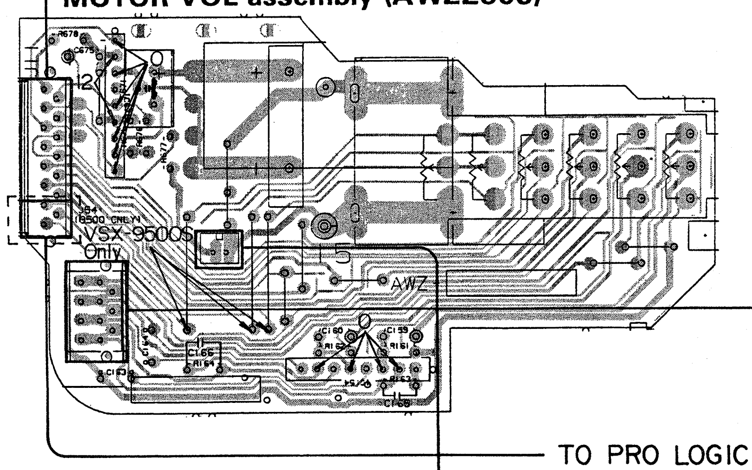


AF assembly (AWZ2507)

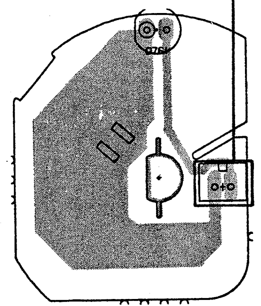
TO VIDEO/SUR/CNTROL ASSEMBLY 44 (P38)
TO FRONT CONTROL ASSEMBLY J1 (P19
TO TUNER ASSEMBLY C-1 (P56)
TO VIDEO/SUR/CONTROL ASSEMBLY CN6 (P38)
TO REAR AMP ASS J3 (P39)
TO PRO LOGIC ASSEMBLY CN54 (P50)
TO S TERM/CENTER SP ASSEMBLY CN52 (P12)
VSX-9500S Only
TO S TERM/CENTER SP ASSEMBLY GND (P11)
HEAD
Q2
Q4
Q3
Q1
ANP1191-H
PA0016
PA001
TC9182
TC9154
TC9162
TC9163
TC9164
TC9163N
RY502
RY503
RY504
CN3
AWZ
AWK
VSX-7500S Only
VSX-9500S Only
PHONO
TUNER
CD
LINE
TAPE1 REC PLAY
TAPE2 REC PLAY
VIDEO
TV
VDP
VCR1 REC PLAY
VCR2 REC PLAY
VCR3 IN
PRE OUT
POWER IN
Q212 Q208 IC202 Q210 Q206 Q202 Q214
IC165 IC168 IC167
IC101 IC103
Q209 Q205 Q201 Q213
IC102 Q102 Q101
IC104
IC201
Q207 Q512 Q211 Q216
Q513 Q502 Q505 Q507 Q215
Q503 Q506
IC105
IC505
IC152 IC151 Q151 IC153
IC501 IC504
IC502
Q508
Q511 Q509

MOTOR VOL assembly (AWZ2509)

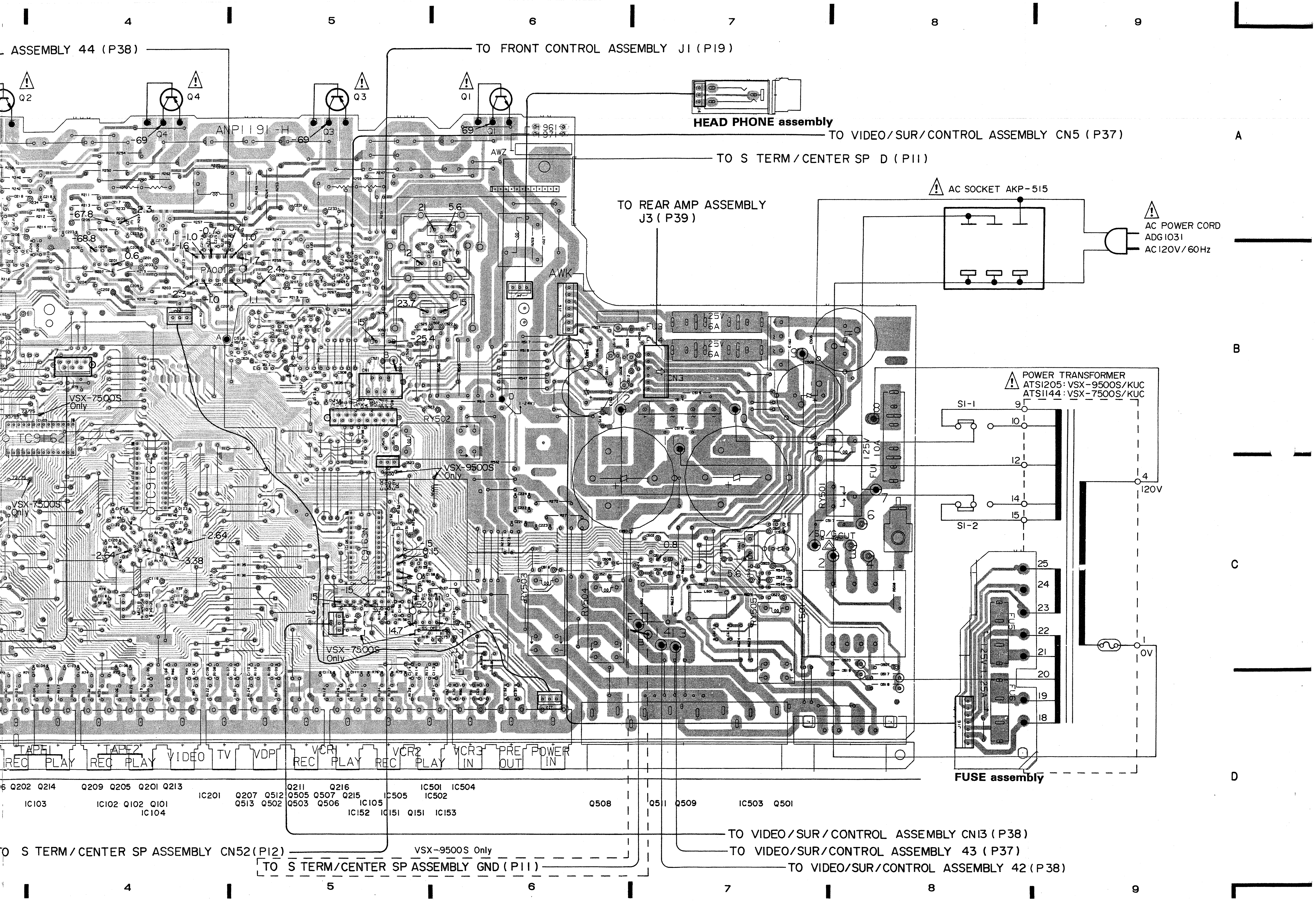
TO VIDEO/SUR/CONTROL ASSEMBLY CN11 (P37)

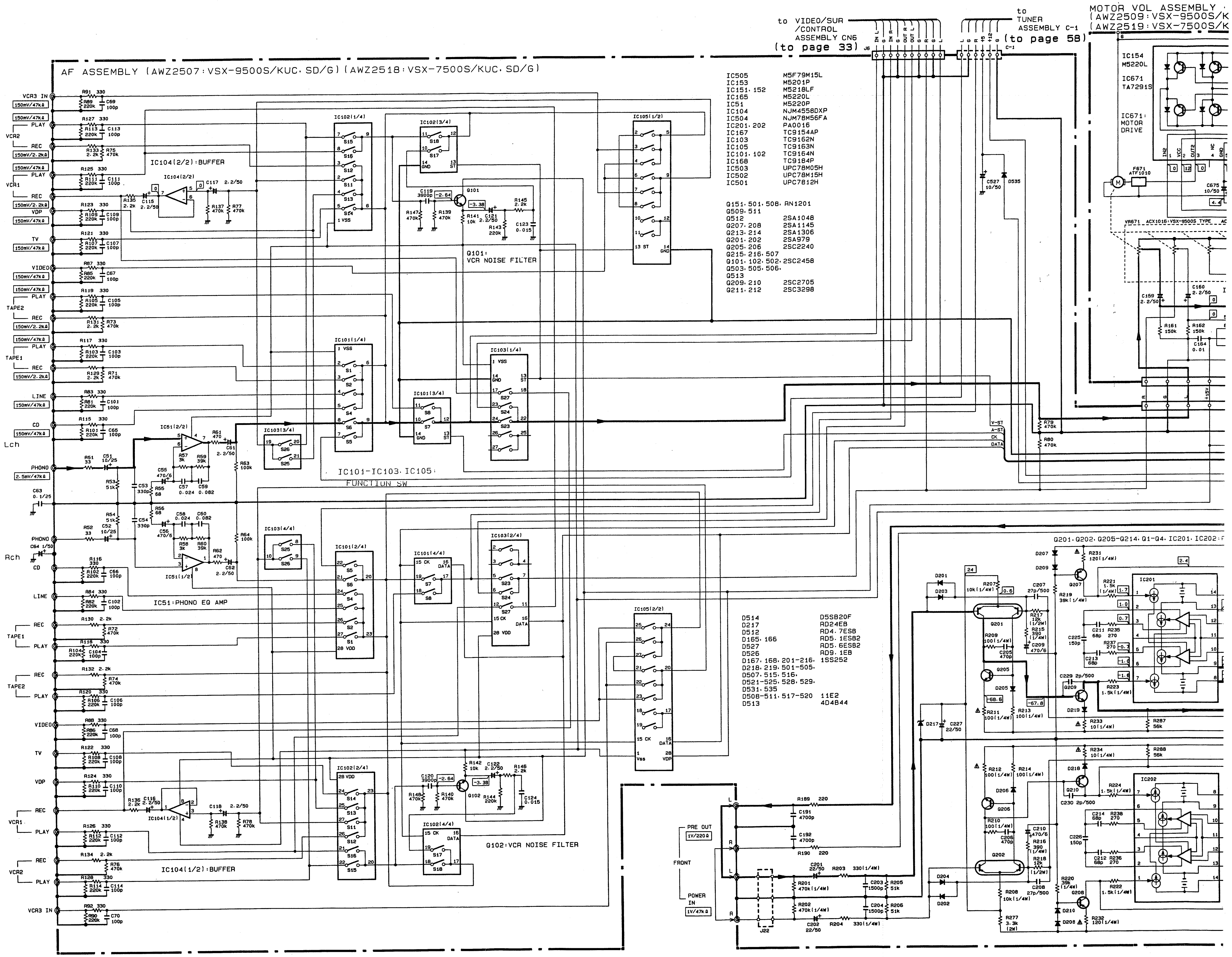


VSX-9500S Only
AWZ



VOL IND assembly

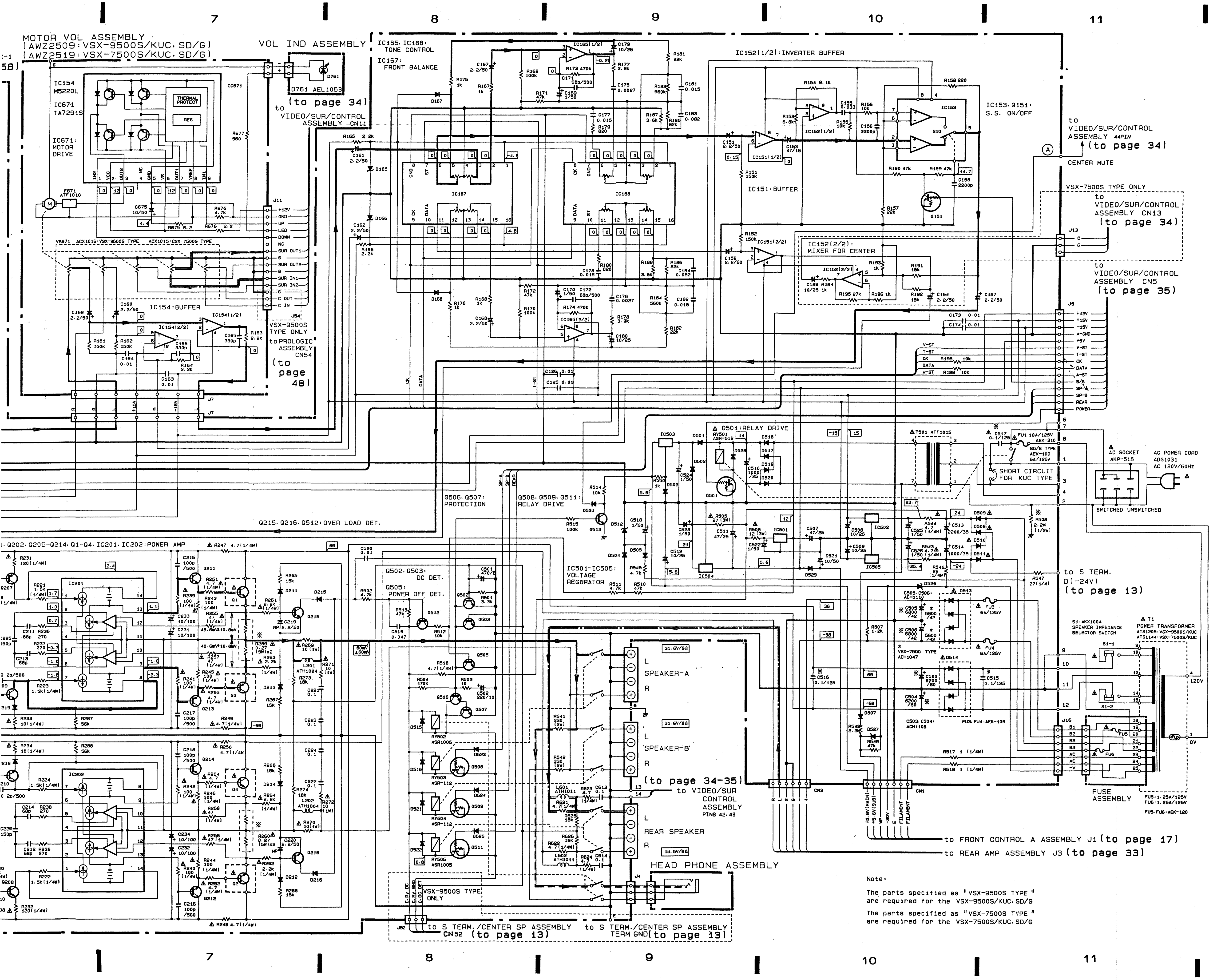

4
5
6
7
8
9
A
B
C
D
ASSEMBLY 44 (P38)
TO FRONT CONTROL ASSEMBLY J1 (P19)
Q2
Q4
Q3
Q1
HEAD PHONE assembly
TO VIDEO/SUR/CONTROL ASSEMBLY CN5 (P37)
TO S TERM/CENTER SP D (P11)
ANP1191-H
AWZ
AWK
TO REAR AMP ASSEMBLY J3 (P39)
AC SOCKET AKP-515
AC POWER CORD ADG1031 AC120V/60Hz
POWER TRANSFORMER ATS1205: VSX-9500S/KUC ATS1144: VSX-7500S/KUC
S1-1
S1-2
120V
0V
125V 6A
FU3
FU4
CN3
FU1 125V 10A
RY501
RY502
RY503
RY504
RY505
T501
FU5
FU6
125V 2.5A
J16
VSX-7500S Only
VSX-9500S Only
TC9162
TC9163N
IC916
PA0016
CN1
TAPE1 REC PLAY
TAPE2 REC PLAY
VIDEO
TV
VDP
VCR1 REC PLAY
VCR2 REC PLAY
VCR3 IN
PRE OUT
POWER IN
FUSE assembly
Q206 Q202 Q214
IC103
Q209 Q205 Q201 Q213
IC102 Q102 Q101
IC104
IC201
Q207 Q512
Q513 Q502
Q211 Q505 Q503
Q216
Q507 Q215
Q506
IC105
IC152 IC151 Q151
IC501 IC504
IC505 IC502
IC153
Q508
Q511 Q509
IC503 Q501
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)
TO S TERM/CENTER SP ASSEMBLY CN52 (P12)
VSX-9500S Only
TO VIDEO/SUR/CONTROL ASSEMBLY 43 (P37)
TO S TERM/CENTER SP ASSEMBLY GND (P11)
TO VIDEO/SUR/CONTROL ASSEMBLY 42 (P38)


AF ASSEMBLY (AWZ2507:VSX-9500S/KUC, SD/G) (AWZ2518:VSX-7500S/KUC, SD/G)
to VIDEO/SUR /CONTROL ASSEMBLY CN6 (to page 33)
J6
IN L
G
IN R
G
OUT R
OUT L
G
R
G
L
to TUNER ASSEMBLY C-1 (to page 58)
C-1
MOTOR VOL ASSEMBLY
(AWZ2509:VSX-9500S/K
(AWZ2519:VSX-7500S/K
IC154 M5220L
IC671 TA7291S
IC671: MOTOR DRIVE
VCR3 IN
VCR2
PLAY
REC
VCR1
VDP
TV
VIDEO
TAPE2
TAPE1
LINE
CD
Lch
PHONO
Rch
150mV/47kΩ
150mV/2.2kΩ
2.5mV/47kΩ
IC104(2/2):BUFFER
IC104(1/2):BUFFER
IC51:PHONO EQ AMP
IC102(1/4)
IC102(3/4)
IC102(2/4)
IC102(4/4)
IC101(1/4)
IC101(2/4)
IC101(3/4)
IC101(4/4)
IC103(1/4)
IC103(2/4)
IC103(3/4)
IC103(4/4)
IC105(1/2)
IC105(2/2)
IC51(2/2)
IC51(1/2)
Q101: VCR NOISE FILTER
Q102:VCR NOISE FILTER
IC101-IC103, IC105: FUNCTION SW
V-ST
A-ST
CK
DATA
VR671 ACX1016:VSX-9500S TYPE
F671 ATF1010
Q201, Q202, Q205-Q214, Q1-Q4, IC201, IC202
IC201
IC202
PRE OUT
1V/220Ω
FRONT
POWER IN
1V/47kΩ
J22
1
2
3
4
5
6
A
B
C
D

IC505	M5F79M15L
IC153	M5201P
IC151, 152	M5218LF
IC165	M5220L
IC51	M5220P
IC104	NJM4558DXP
IC504	NJM78M56FA
IC201, 202	PA0016
IC167	TC9154AP
IC103	TC9162N
IC105	TC9163N
IC101, 102	TC9164N
IC168	TC9184P
IC503	UPC78M05H
IC502	UPC78M15H
IC501	UPC7812H

Q151, 501, 508,	RN1201
Q509, 511	
Q512	2SA1048
Q207, 208	2SA1145
Q213, 214	2SA1306
Q201, 202	2SA979
Q205, 206	2SC2240
Q215, 216, 507	
Q101, 102, 502,	2SC2458
Q503, 505, 506,	
Q513	
Q209, 210	2SC2705
Q211, 212	2SC3298

D514	D5SB20F
D217	RD24EB
D512	RD4.7ESB
D165, 166	RD5.1ESB2
D527	RD5.6ESB2
D526	RD9.1EB
D167, 168, 201-216,	1SS252
D218, 219, 501-505,	
D507, 515, 516,	
D521-525, 528, 529,	
D531, 535	
D508-511, 517-520	11E2
D513	4D4B44


MOTOR VOL ASSEMBLY
(AWZ2509:VSX-9500S/KUC, SD/G)
(AWZ2519:VSX-7500S/KUC, SD/G)
VOL IND ASSEMBLY
D761 AEL1053
(to page 34)
to VIDEO/SUR/CONTROL ASSEMBLY CN11
IC154 M5220L
IC671 TA7291S
IC671: MOTOR DRIVE
THERMAL PROTECT
IC154:BUFFER
VSX-9500S TYPE ONLY
to PROLOGIC ASSEMBLY CN54
(to page 48)
IC165, IC168: TONE CONTROL
IC167: FRONT BALANCE
IC167
IC168
IC152(1/2):INVERTER BUFFER
IC151:BUFFER
IC152(2/2): MIXER FOR CENTER
IC153, Q151: S.S. ON/OFF
to VIDEO/SUR/CONTROL ASSEMBLY 44PIN
(to page 34)
CENTER MUTE
VSX-7500S TYPE ONLY
to VIDEO/SUR/CONTROL ASSEMBLY CN13
(to page 34)
to VIDEO/SUR/CONTROL ASSEMBLY CN5
(to page 35)
Q501:RELAY DRIVE
Q506, Q507: PROTECTION
Q508, Q509, Q511: RELAY DRIVE
Q215, Q216, Q512:OVER LOAD DET.
IC501-IC505: VOLTAGE REGURATOR
SHORT CIRCUIT FOR KUC TYPE
AC SOCKET AKP-515
AC POWER CORD ADG1031 AC 120V/60Hz
SWITCHED UNSWITCHED
to S TERM. D(-24V) (to page 13)
Q201, Q202, Q205-Q214, Q1-Q4, IC201, IC202:POWER AMP
Q502, Q503: DC DET.
Q505: POWER OFF DET.
SPEAKER-A
SPEAKER-B
REAR SPEAKER
(to page 34-35)
to VIDEO/SUR CONTROL ASSEMBLY PINS 42, 43
HEAD PHONE ASSEMBLY
VSX-9500S TYPE ONLY
to S TERM./CENTER SP ASSEMBLY CN52 (to page 13)
to S TERM./CENTER SP ASSEMBLY TERM GND (to page 13)
S1:AKX1004 SPEAKER IMPEDANCE SELECTOR SWITCH
T1 POWER TRANSFORMER ATS1205:VSX-9500S/KUC ATS1144:VSX-7500S/KUC
FUSE ASSEMBLY
FU5:1.25A/125V FU6:1.25A/125V
FU5, FU6:AEK-120
FU3, FU4:AEK-109
C503, C504: ACH1106
C505, C506: ACH1110
to FRONT CONTROL A ASSEMBLY J1 (to page 17)
to REAR AMP ASSEMBLY J3 (to page 33)

Note:

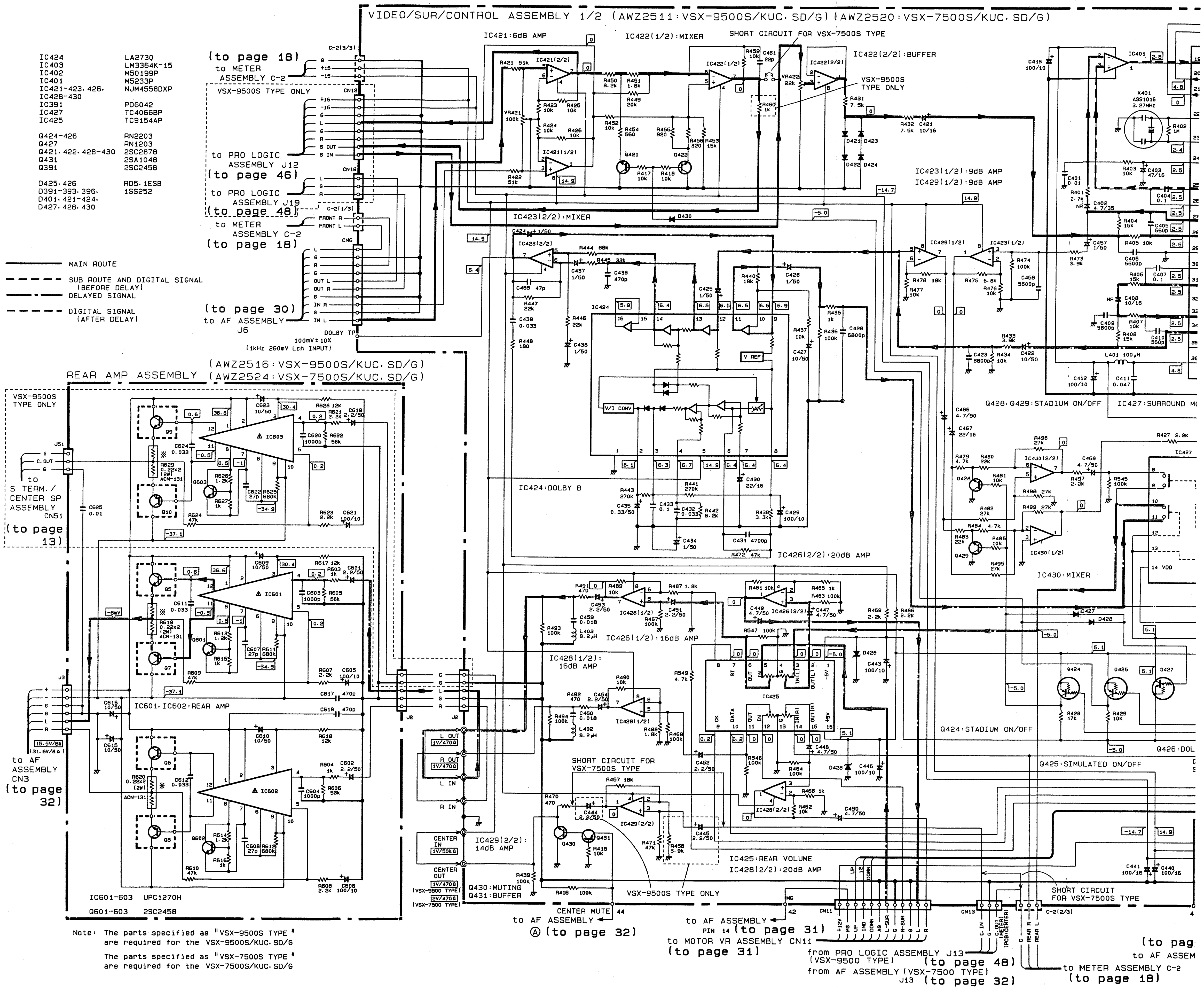
The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G

3.5 VIDEO/SUR/CONTROL assembly 1/2 (AWZ2511) AND REAR AMP assembly (AWZ2516)

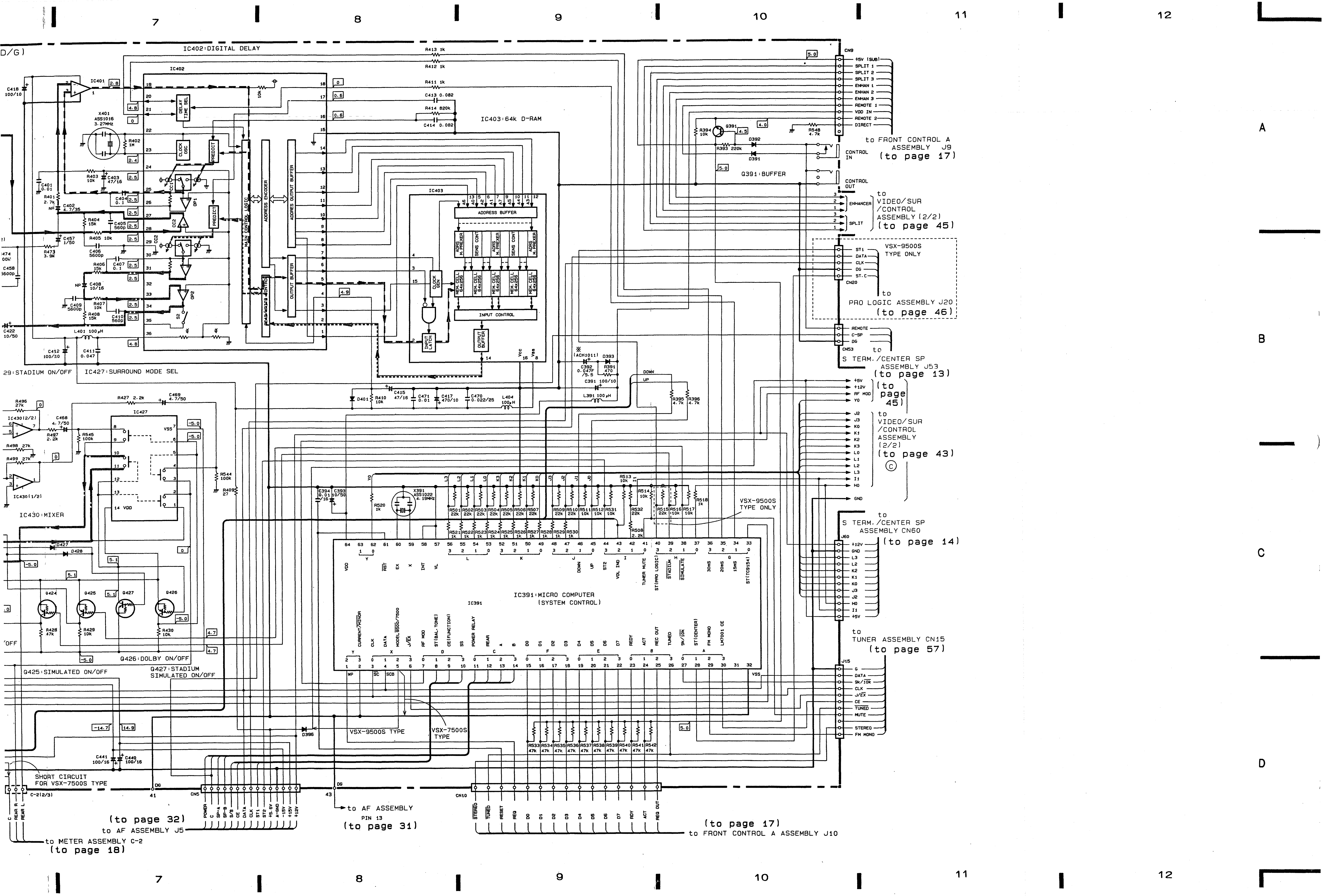
IC424	LA2730
IC403	LM3364K-15
IC402	M50199P
IC401	M5233P
IC421-423, 426, IC428-430	NJM4558DXP
IC391	PDG042
IC427	TC4066BP
IC425	TC9154AP
Q424-426	RN2203
Q427	RN1203
Q421, 422, 428-430	2SC2878
Q431	2SA1048
Q391	2SC2458
D425, 426	RD5.1ESB
D391-393, 396, D401, 421-424, D427, 428, 430	1SS252

———	MAIN ROUTE
– – – –	SUB ROUTE AND DIGITAL SIGNAL (BEFORE DELAY)
—·—·—	DELAYED SIGNAL
—— ——	DIGITAL SIGNAL (AFTER DELAY)


VIDEO/SUR/CONTROL ASSEMBLY 1/2 (AWZ2511: VSX-9500S/KUC, SD/G) (AWZ2520: VSX-7500S/KUC, SD/G)
IC421: 6dB AMP
IC422(1/2): MIXER
SHORT CIRCUIT FOR VSX-7500S TYPE
IC422(2/2): BUFFER
VSX-9500S TYPE ONLY
(to page 18) to METER ASSEMBLY C-2
to PRO LOGIC ASSEMBLY J12 (to page 46)
to PRO LOGIC ASSEMBLY J19 (to page 48)
to METER ASSEMBLY C-2 (to page 18)
(to page 30) to AF ASSEMBLY J6
DOLBY TP
100mV±10% (1kHz 260mV Lch INPUT)
IC423(2/2): MIXER
IC423(1/2): 9dB AMP
IC429(1/2): 9dB AMP
IC424
V/I CONV
V REF
IC424: DOLBY B
IC426(2/2): 20dB AMP
IC426(1/2): 16dB AMP
IC428(1/2): 16dB AMP
IC425
IC425: REAR VOLUME
IC428(2/2): 20dB AMP
IC429(2/2): 14dB AMP
SHORT CIRCUIT FOR VSX-7500S TYPE
Q430: MUTING
Q431: BUFFER
VSX-9500S TYPE ONLY
CENTER MUTE
to AF ASSEMBLY Ⓐ (to page 32)
to AF ASSEMBLY PIN 14 (to page 31)
to MOTOR VR ASSEMBLY CN11 (to page 31)
from PRO LOGIC ASSEMBLY J13 (VSX-9500 TYPE) (to page 48)
from AF ASSEMBLY (VSX-7500 TYPE) J13 (to page 32)
to METER ASSEMBLY C-2 (to page 18)
to AF ASSEM (to pag
SHORT CIRCUIT FOR VSX-7500S TYPE
Q428, Q429: STADIUM ON/OFF
IC427: SURROUND M
IC430: MIXER
Q424: STADIUM ON/OFF
Q425: SIMULATED ON/OFF
Q426: DOL
X401 ASS1016 3.27MHz
L OUT 1V/470Ω
R OUT 1V/470Ω
L IN
R IN
CENTER IN 1V/50kΩ
CENTER OUT
REAR AMP ASSEMBLY (AWZ2516: VSX-9500S/KUC, SD/G) (AWZ2524: VSX-7500S/KUC, SD/G)
VSX-9500S TYPE ONLY
to S TERM./CENTER SP ASSEMBLY CN51 (to page 13)
to AF ASSEMBLY CN3 (to page 32)
IC603
IC601
IC602
IC601, IC602: REAR AMP
IC601-603 UPC1270H
Q601-603 2SC2458
15.5V/8Ω
31.6V/8Ω

Note: The parts specified as "VSX-9500S TYPE" are required for the VSX-9500S/KUC, SD/G

The parts specified as "VSX-7500S TYPE" are required for the VSX-7500S/KUC, SD/G

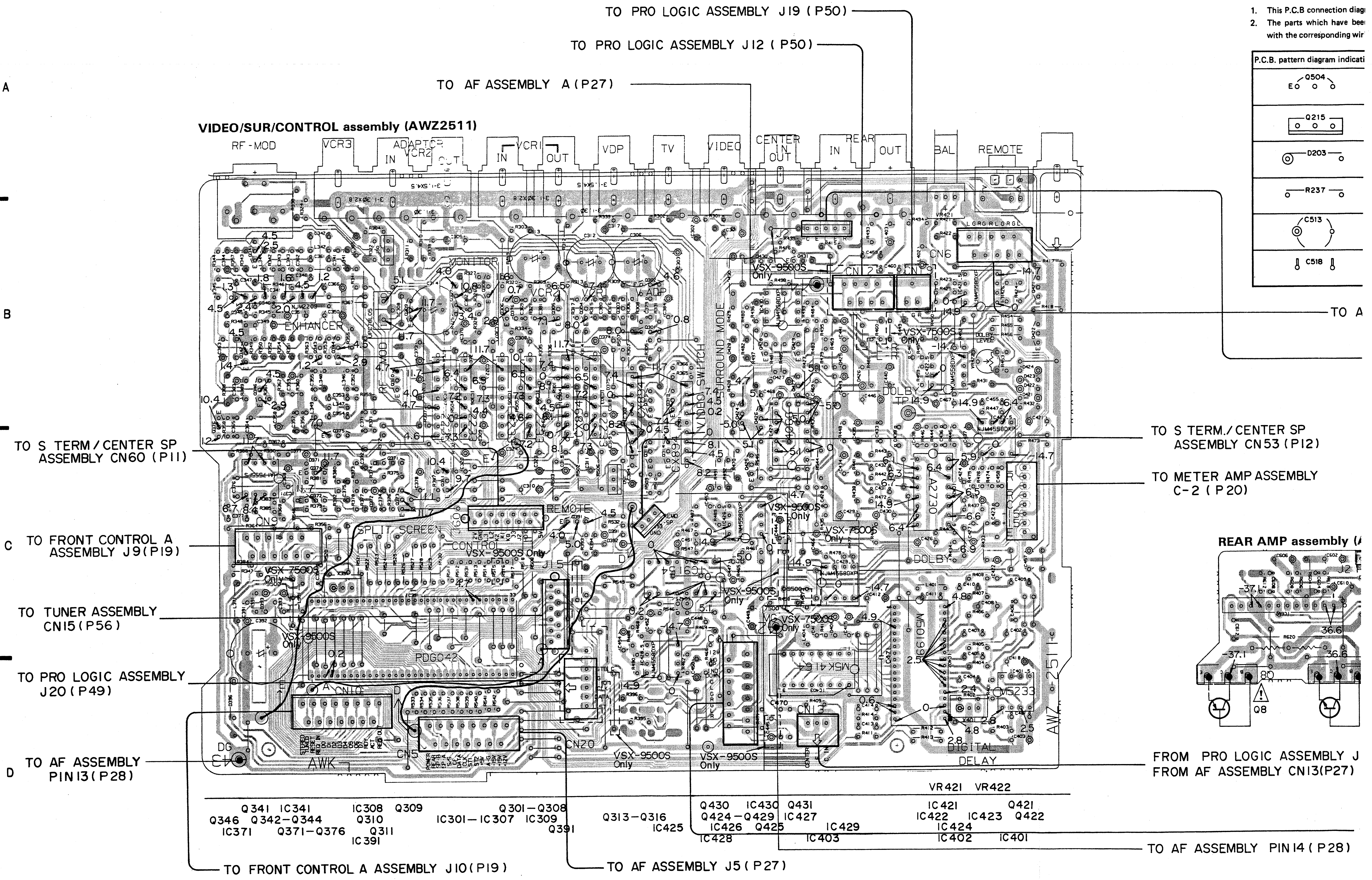

IC402:DIGITAL DELAY
IC402
IC401
X401 ASS1016 3.27MHz
DELAY TIME SEL
CLOCK OSC
PREDICT
MAIN CONTROL LOGIC
ADDRESS ENCODER
ADDRES OUTPUT BUFFER
OUTPUT BUFFER
IC403:64k D-RAM
IC403
ADDRESS BUFFER
ADRS. H. PREXER
SENS CONT
MEM. CELL 64x256
INPUT CONTROL
CLOCK GEN
INPUT LATCH
OUTPUT BUFFER
29:STADIUM ON/OFF
IC427:SURROUND MODE SEL
IC427
IC430(2/2)
IC430(1/2)
IC430:MIXER
Q424
Q425
Q427
Q426
Q426:DOLBY ON/OFF
Q425:SIMULATED ON/OFF
Q427:STADIUM SIMULATED ON/OFF
SHORT CIRCUIT FOR VSX-7500S TYPE
X391 ASS1022 4.19MHz
IC391:MICRO COMPUTER (SYSTEM CONTROL)
IC391
VSX-9500S TYPE ONLY
VSX-9500S TYPE
VSX-7500S TYPE
D396
Q391:BUFFER
CN9
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REMOTE 1
VDD IN
REMOTE 2
DIRECT
to FRONT CONTROL A ASSEMBLY J9 (to page 17)
CONTROL IN
CONTROL OUT
ENHANCER
SPLIT
to VIDEO/SUR /CONTROL ASSEMBLY (2/2) (to page 45)
CN20
ST1
DATA
CLK
DG
ST-C
VSX-9500S TYPE ONLY
to PRO LOGIC ASSEMBLY J20 (to page 46)
CN53
REMOTE
C-SP
DG
to S TERM./CENTER SP ASSEMBLY J53 (to page 13)
+5V
+12V
RF MOD
Y0
(to page 45)
J2 J3 K0 K1 K2 K3 L0 L1 L2 L3 I1 H0
to VIDEO/SUR /CONTROL ASSEMBLY (2/2) (to page 43)
Ⓒ
GND
to S TERM./CENTER SP ASSEMBLY CN60 (to page 14)
J60
+12V GND L3 L2 K2 K1 K0 J3 J2 H0 I1 +5V
to TUNER ASSEMBLY CN15 (to page 57)
J15
G DATA 9K/10k CLK J/EX CE TUNED MUTE STEREO FM MONO
CN5
POWER C SP-A SP-B S/S CE DATA CLK ST1 ST2 +5.6V A-GND -15V +15V +12V
to AF ASSEMBLY PIN 13 (to page 31)
(to page 32) to AF ASSEMBLY J5
to METER ASSEMBLY C-2 (to page 18)
C-2(2/3)
REAR R REAR L C
CN10
STEREO TUNED RESET REQ D0 D1 D2 D3 D4 D5 D6 D7 RDY ACT REQ OUT
(to page 17) to FRONT CONTROL A ASSEMBLY J10
7 8 9 10 11 12
A B C D

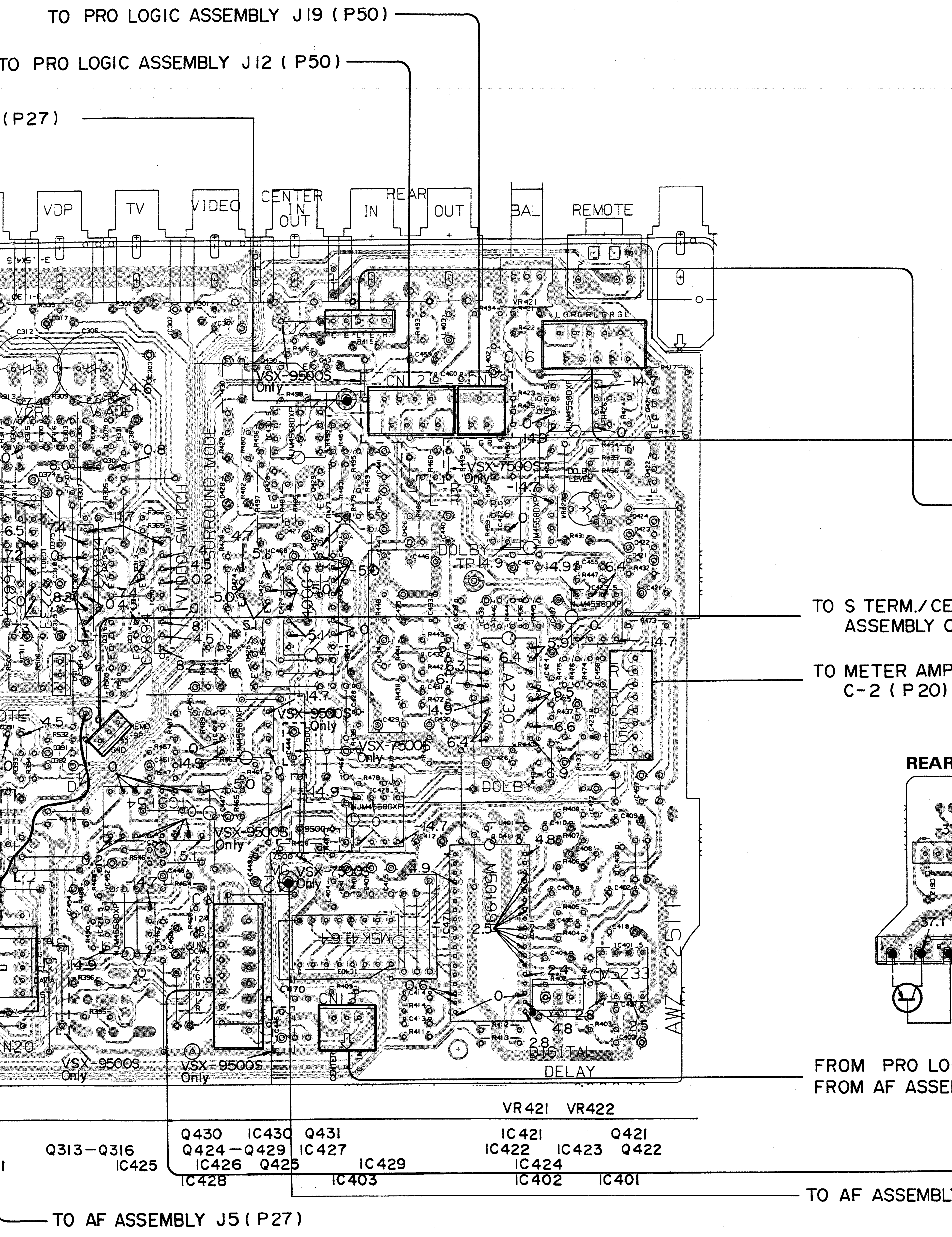
NOTE

1. This P.C.B connection diag

2. The parts which have bee
with the corresponding wir

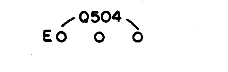
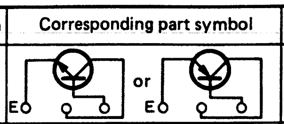
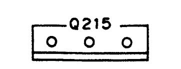
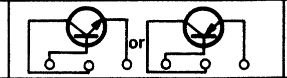
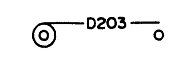
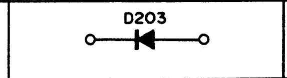
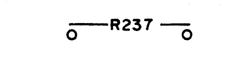
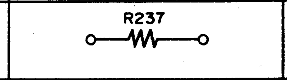
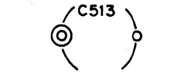
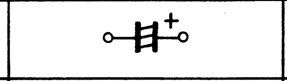
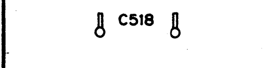
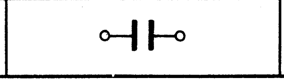
VIDEO/SUR/CONTROL assembly (AWZ2511)


1
2
3
4
5
6
A
B
C
D
TO PRO LOGIC ASSEMBLY J19 (P50)
TO PRO LOGIC ASSEMBLY J12 (P50)
TO AF ASSEMBLY A (P27)
RF-MOD
VCR3
ADAPTOR
VCR2
IN
OUT
VCR1
VDP
TV
VIDEO
CENTER
REAR
BAL
REMOTE
MONITOR
ENHANCER
RF MOD
VIDEO SWITCH
SURROUND MODE
DOLBY
DOLBY LEVEL
VSX-9500S Only
VSX-7500S Only
SPLIT SCREEN
CONTROL
PDG042
DIGITAL DELAY
CN5
CN10
CN20
CN13
CN6
J15
AWZ2511
DG
TO A
TO S TERM/CENTER SP ASSEMBLY CN60 (P11)
TO FRONT CONTROL A ASSEMBLY J9 (P19)
TO TUNER ASSEMBLY CN15 (P56)
TO PRO LOGIC ASSEMBLY J20 (P49)
TO AF ASSEMBLY PIN13 (P28)
TO S TERM./CENTER SP ASSEMBLY CN53 (P12)
TO METER AMP ASSEMBLY C-2 (P20)
FROM PRO LOGIC ASSEMBLY J
FROM AF ASSEMBLY CN13(P27)
TO AF ASSEMBLY PIN14 (P28)
TO AF ASSEMBLY J5 (P27)
TO FRONT CONTROL A ASSEMBLY J10 (P19)
Q341 IC341
Q346 Q342–Q344
IC371 Q371–Q376
IC308 Q309
Q310
Q311
IC391
Q301–Q308
IC301–IC307 IC309
Q391
Q313–Q316
IC425
Q430 IC430 Q431
Q424–Q429 IC427
IC426 Q425
IC428
IC429
IC403
VR421 VR422
IC421 Q421
IC422 IC423 Q422
IC424
IC402 IC401
P.C.B. pattern diagram indicati
Q504
Q215
D203
R237
C513
C518
REAR AMP assembly (
-37.1
36.6
Q8


TO PRO LOGIC ASSEMBLY J19 (P50)
TO PRO LOGIC ASSEMBLY J12 (P50)
(P27)
VDP
TV
VIDEO
CENTER IN OUT
REAR IN OUT
BAL
REMOTE
CN6
VSX-9500S Only
VSX-7500S Only
DOLBY LEVEL
SURROUND MODE
VIDEO SWITCH
DOLBY TP
DOLBY
LA2730
M50196
MSK4164
M5233
CN13
CN20
DIGITAL DELAY
AWZ-2511
TO S TERM./CENTER SP ASSEMBLY CN53 (P12)
TO METER AMP ASSEMBLY C-2 (P20)
FROM PRO LOGIC ASSEMBLY J13 (P50) (VSX-9500 TYPE)
FROM AF ASSEMBLY CN13(P27) (VSX-7500 TYPE)
VR421 VR422
Q313–Q316
IC425
Q430 IC430 Q431
Q424–Q429 IC427
IC426 Q425
IC428
IC429
IC403
IC421 Q421
IC422 IC423 Q422
IC424
IC402 IC401
TO MOTOR VOL ASSEMBLY J11 (P26)
TO AF ASSEMBLY PIN14 (P28)
TO AF ASSEMBLY J5 (P27)

NOTE

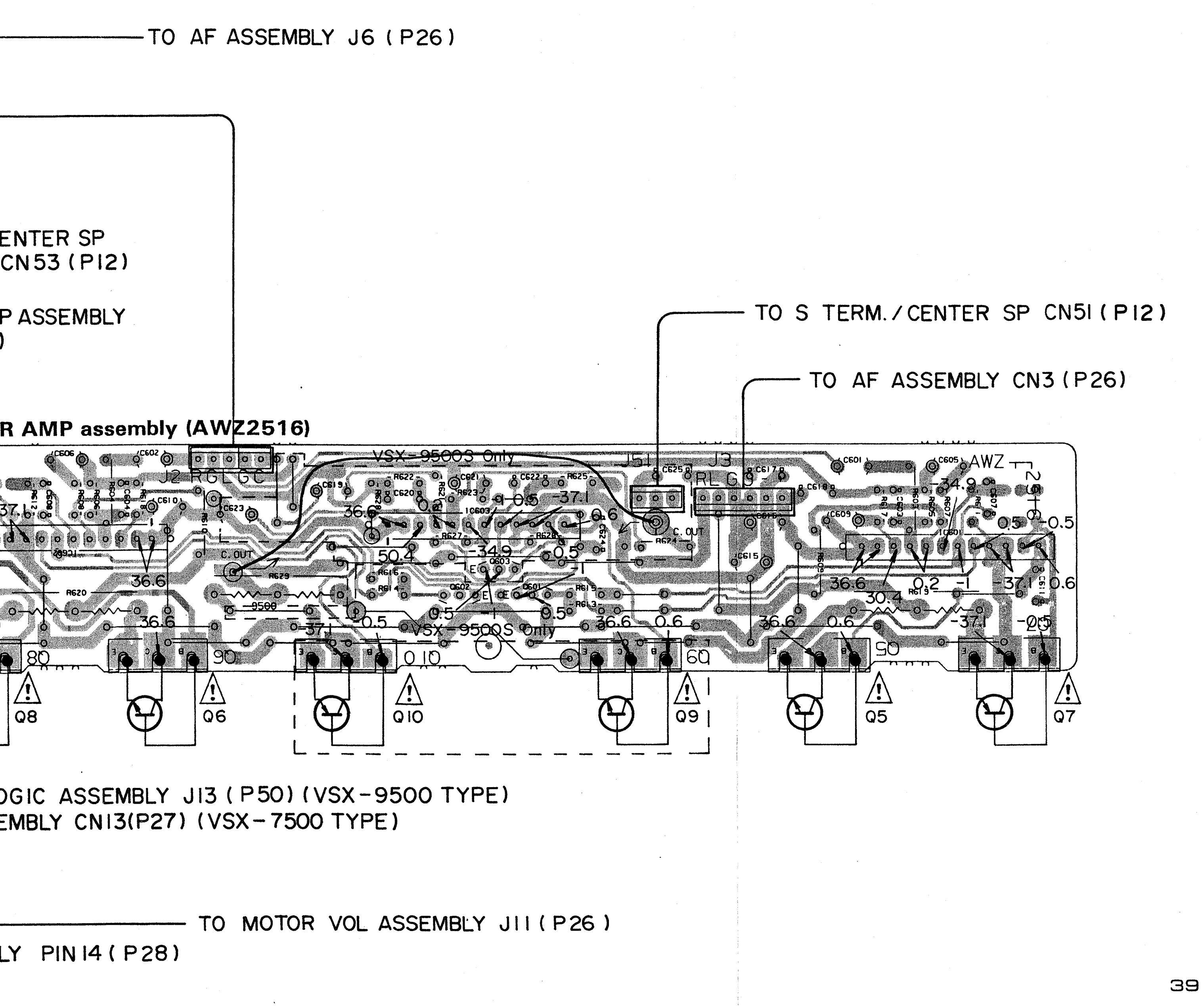
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
 E Q504	 E or E	Transistor
 Q215	 or	Radiator type transistor
 D203	 D203	Diode
 R237	 R237	Resistor
 C513	 +	Capacitor (Polarity)
 C518		Capacitor (Non-polarity)

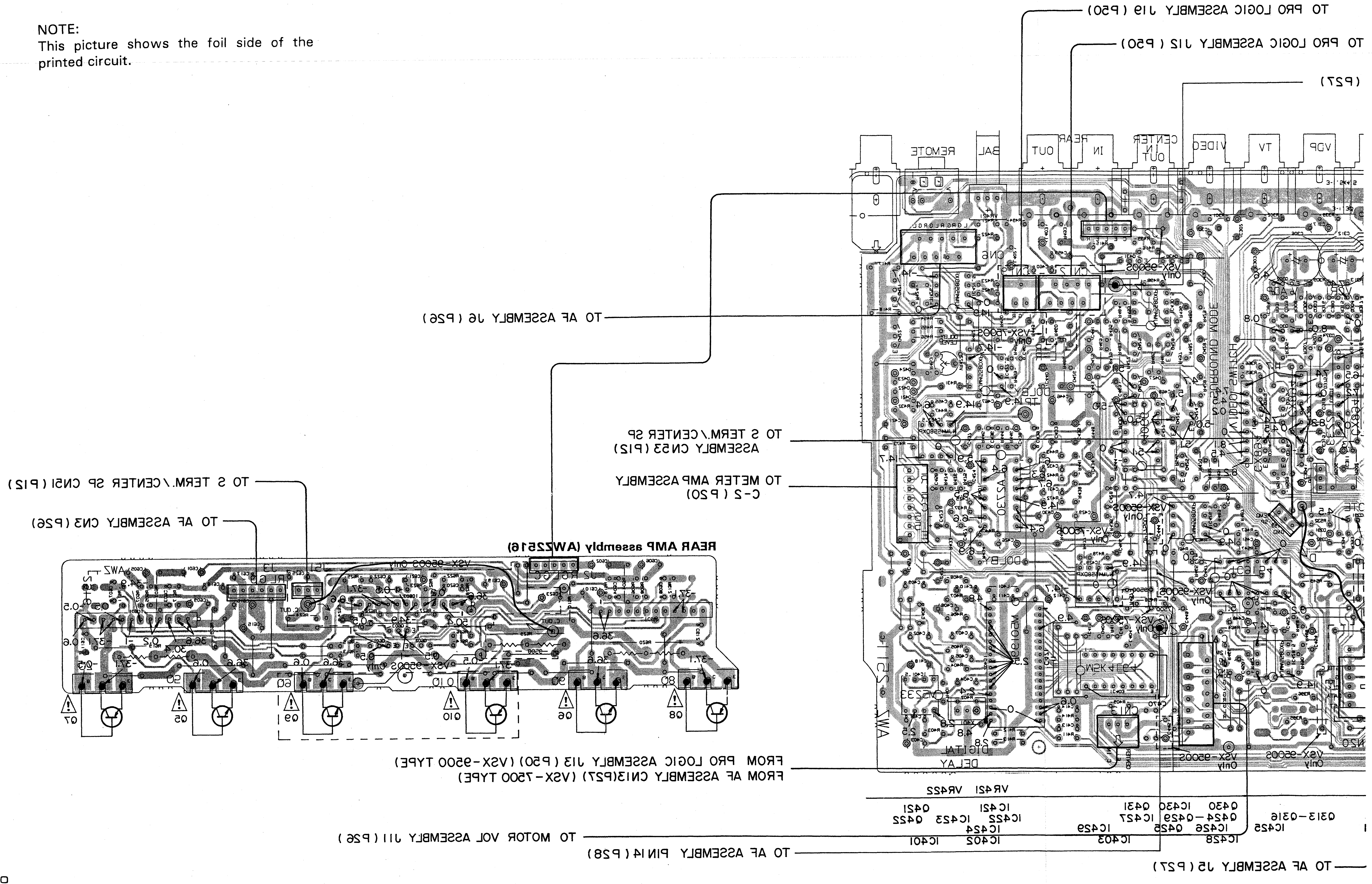
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

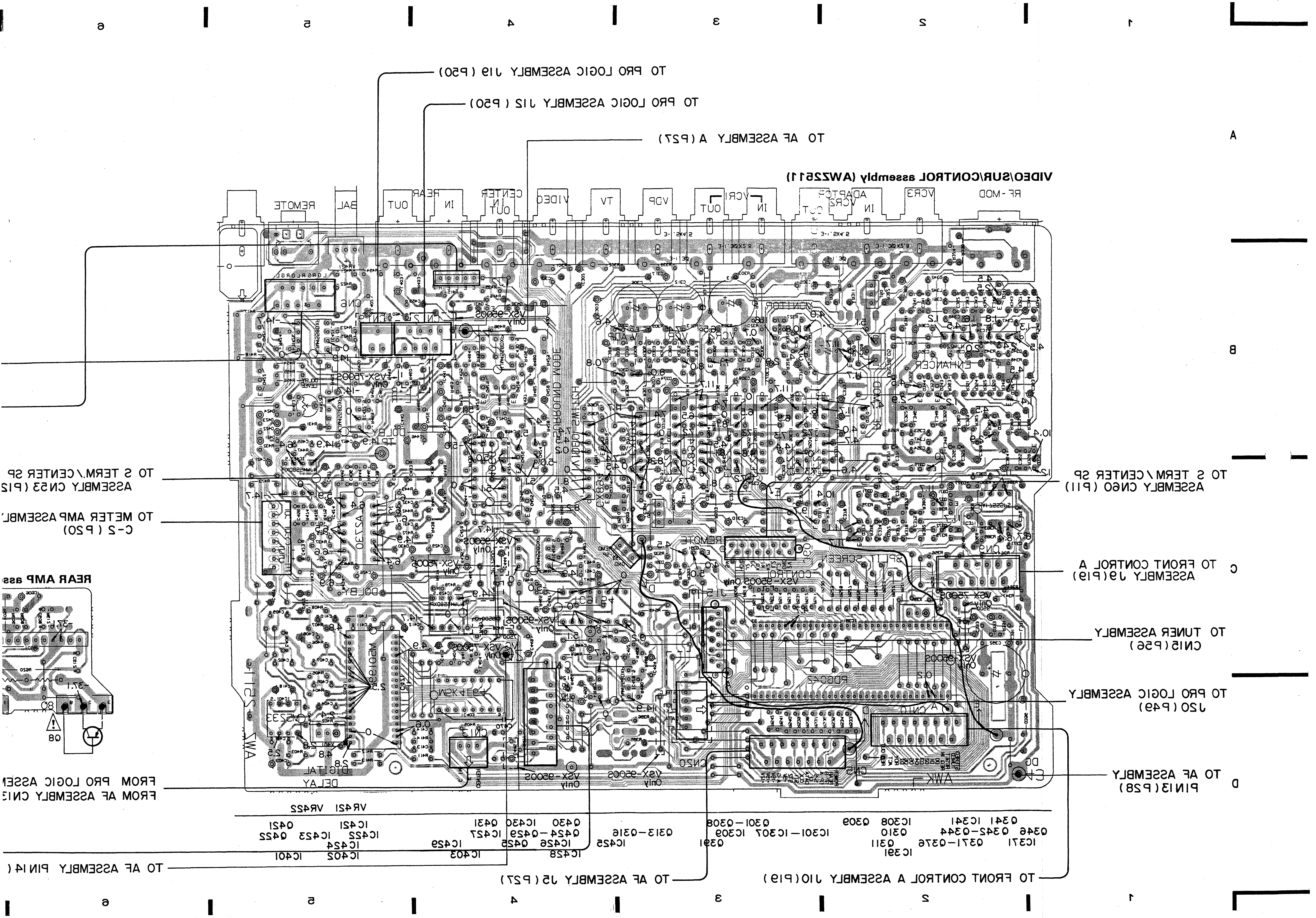
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


TO AF ASSEMBLY J6 (P26)
TO S TERM./CENTER SP CN51 (P12)
TO AF ASSEMBLY CN3 (P26)
REAR AMP assembly (AWZ2516)
J2 RGLGC
J51
J3 RLG
C. OUT
AWZ
VSX-9500S Only
Q8
Q6
Q10
Q9
Q5
Q7

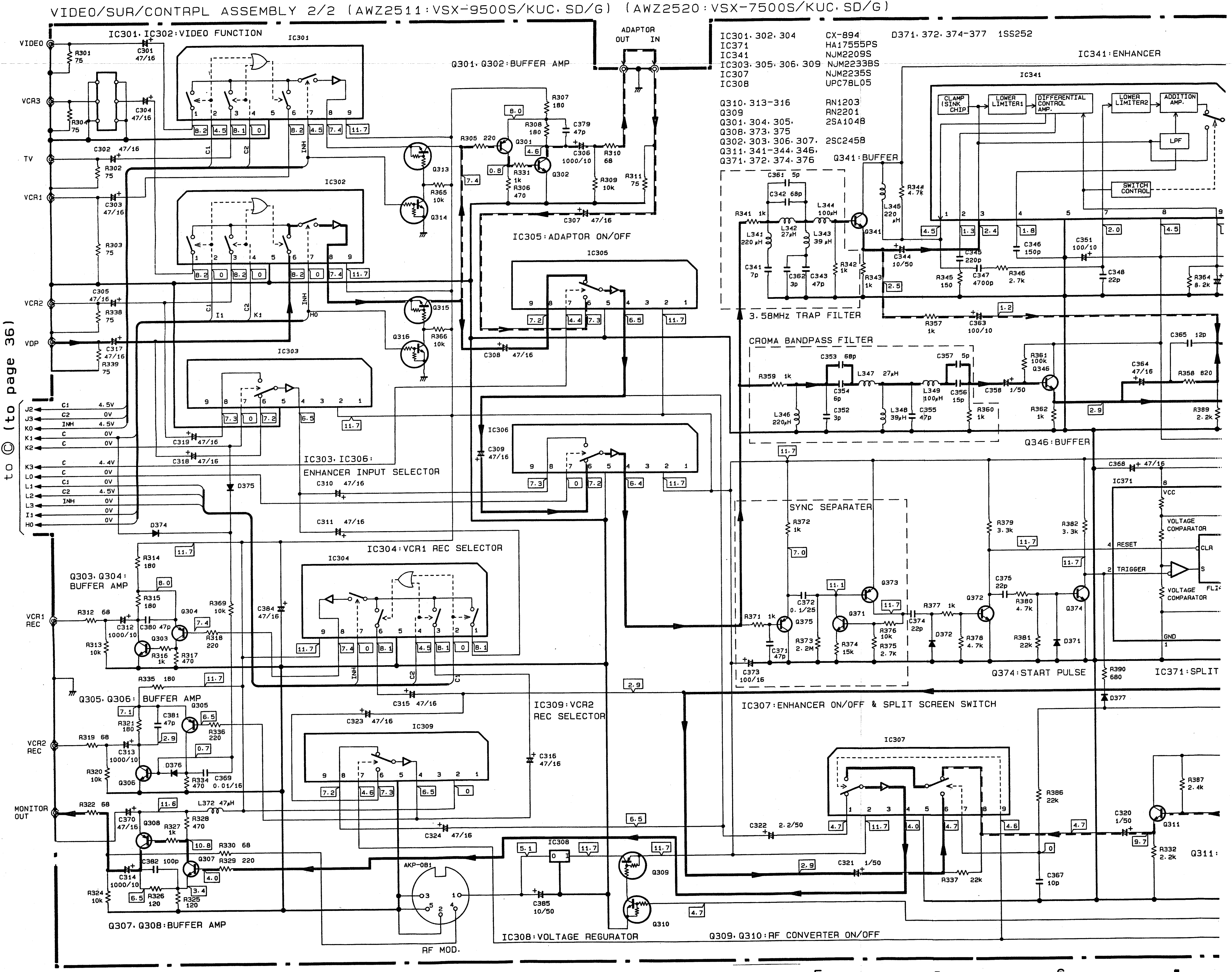
NOTE:
This picture shows the foil side of the printed circuit.


TO PRO LOGIC ASSEMBLY J19 (P50)
TO PRO LOGIC ASSEMBLY J12 (P50)
(P27)
REMOTE
BAL
REAR OUT
IN
CENTER IN OUT
VIDEO
TV
VDP
TO AF ASSEMBLY J6 (P26)
TO S TERM./CENTER SP ASSEMBLY CN53 (P12)
TO METER AMP ASSEMBLY C-2 (P20)
TO S TERM./CENTER SP CN51 (P12)
TO AF ASSEMBLY CN3 (P26)
REAR AMP assembly (AWZ2516)
VSX-9500S Only
DOLBY
DIGITAL DELAY
Q7
Q5
Q9
Q10
Q6
Q8
FROM PRO LOGIC ASSEMBLY J13 (P50) (VSX-9500 TYPE)
FROM AF ASSEMBLY CN13(P27) (VSX-7500 TYPE)
VR421 VR422
Q421 IC421 IC430 Q431 Q430
Q422 IC423 IC422 Q424-Q429 IC427
IC424 IC429 Q425 IC426 IC425 Q313-Q316
IC401 IC402 IC403 IC428
TO MOTOR VOL ASSEMBLY J11 (P26)
TO AF ASSEMBLY PIN14 (P28)
TO AF ASSEMBLY J5 (P27)

VIDEO/SUR/CONTROL assembly (AWZ2511)

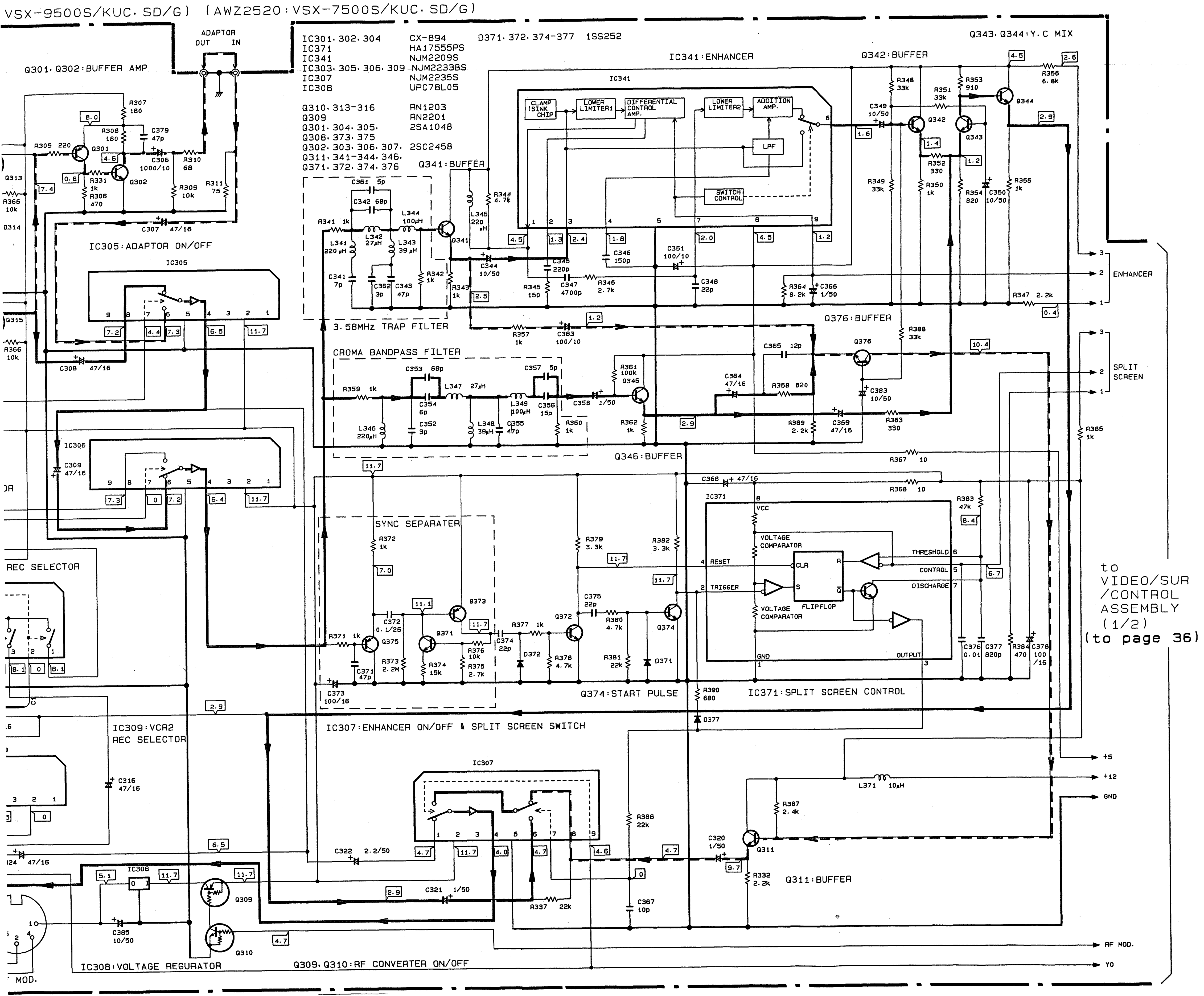

1
2
3
4
5
6
A
B
C
D
TO PRO LOGIC ASSEMBLY J19 (P50)
TO PRO LOGIC ASSEMBLY J12 (P50)
TO AF ASSEMBLY A (P27)
RF-MOD
VCR3
IN
ADAPTOR VCR2
OUT
IN
VCR1
OUT
VDP
TV
VIDEO
CENTER IN OUT
REAR IN
OUT
BAL
REMOTE
MONITOR
ENHANCER
SPLIT SCREEN CONTROL
REMOTE
DOLBY
DIGITAL DELAY
VSX-9500S Only
VSX-7500S Only
TO S TERM./CENTER SP ASSEMBLY CN60 (P11)
TO FRONT CONTROL A ASSEMBLY J9 (P19)
TO TUNER ASSEMBLY CN15 (P56)
TO PRO LOGIC ASSEMBLY J20 (P49)
TO AF ASSEMBLY PIN13 (P28)
TO FRONT CONTROL A ASSEMBLY J10 (P19)
TO AF ASSEMBLY J5 (P27)
TO AF ASSEMBLY PIN14 (
FROM PRO LOGIC ASSEM
FROM AF ASSEMBLY CN1
TO S TERM./CENTER SP ASSEMBLY CN53 (P12
TO METER AMP ASSEMBL
C-2 (P20)
REAR AMP ass
VR421 VR422
Q341 IC341
Q346 Q342–Q344
IC371 Q371–Q376
IC308 Q309
Q310
Q311
IC391
Q301–Q308
IC301–IC307 IC309
Q391
Q313–Q316
IC425
Q430 IC430 Q431
Q424–Q429 IC427
IC426 Q425 IC429
IC428 IC403
IC421 Q421
IC422 IC423 Q422
IC424
IC402 IC401

3.6 VIDEO/SUR/CONTROL assembly 2/2 (AWZ2511)



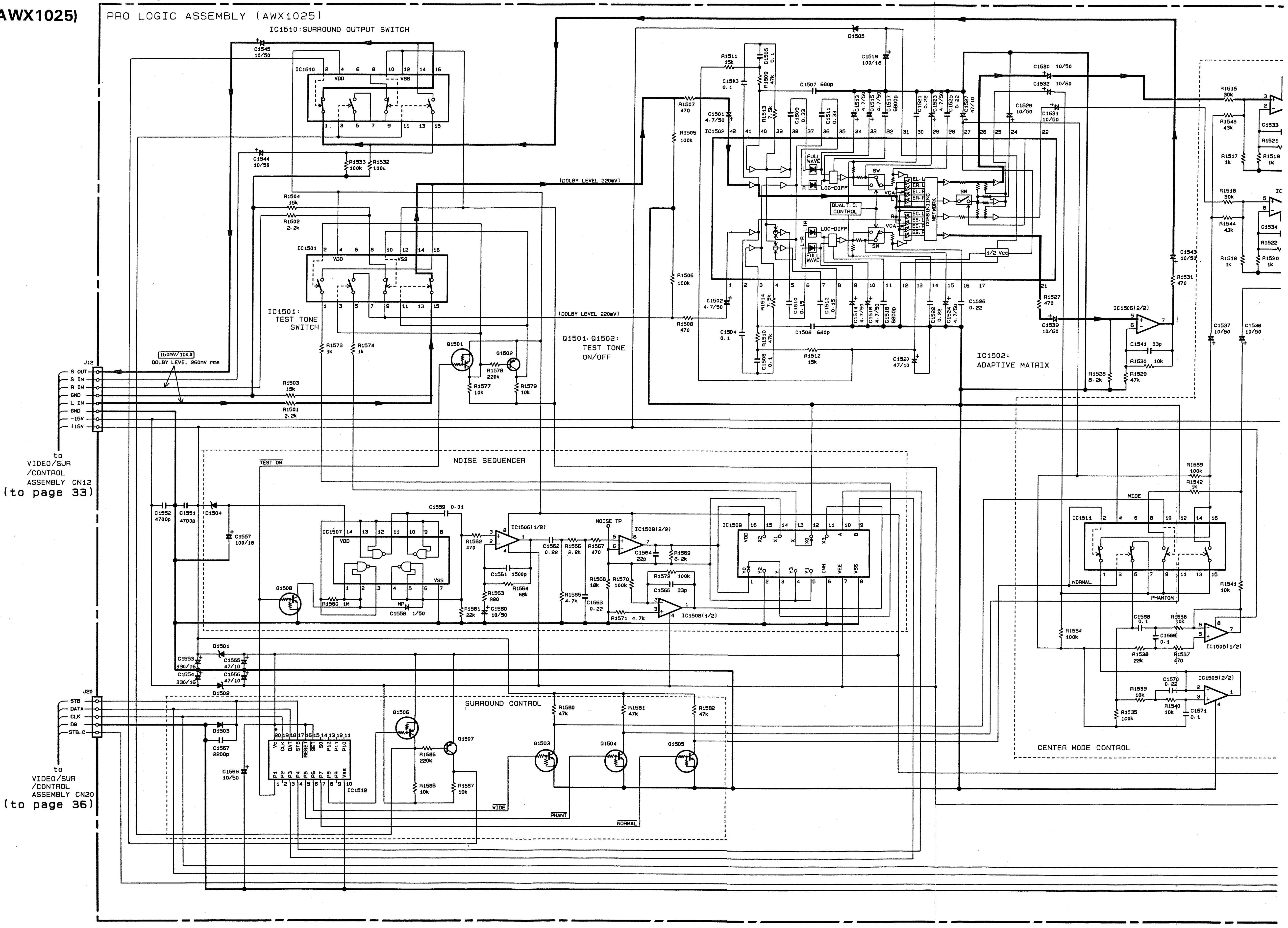
VIDEO/SUR/CONTRPL ASSEMBLY 2/2 (AWZ2511:VSX-9500S/KUC,SD/G) (AWZ2520:VSX-7500S/KUC,SD/G)
IC301,IC302:VIDEO FUNCTION
IC301
IC302
IC303
IC303,IC306: ENHANCER INPUT SELECTOR
IC304:VCR1 REC SELECTOR
IC305:ADAPTOR ON/OFF
IC306
IC307:ENHANCER ON/OFF & SPLIT SCREEN SWITCH
IC308:VOLTAGE REGURATOR
IC309:VCR2 REC SELECTOR
IC341:ENHANCER
IC371:SPLIT
Q301,Q302:BUFFER AMP
Q303,Q304: BUFFER AMP
Q305,Q306: BUFFER AMP
Q307,Q308:BUFFER AMP
Q309,Q310:RF CONVERTER ON/OFF
Q341:BUFFER
Q346:BUFFER
Q374:START PULSE
Q311:
ADAPTOR OUT IN
VIDEO
VCR3
TV
VCR1
VCR2
VDP
VCR1 REC
VCR2 REC
MONITOR OUT
J2 J3 K0 K1 K2 K3 L0 L1 L2 L3 I1 H0
C1 4.5V
C2 0V
INH 4.5V
C 0V
C 0V
C 4.4V
C 0V
C1 0V
C2 4.5V
INH 0V
0V
0V
to © (to page 36)
IC301,302,304 CX-894
IC371 HA17555PS
IC341 NJM2209S
IC303,305,306,309 NJM2233BS
IC307 NJM2235S
IC308 UPC78L05
Q310,313-316 RN1203
Q309 RN2201
Q301,304,305, Q308,373,375 2SA1048
Q302,303,306,307, Q311,341-344,346, Q371,372,374,376 2SC2458
D371,372,374-377 1SS252
CLAMP (SINK CHIP)
LOWER LIMITER1
DIFFERENTIAL CONTROL AMP.
LOWER LIMITER2
ADDITION AMP.
LPF
SWITCH CONTROL
3.58MHz TRAP FILTER
CROMA BANDPASS FILTER
SYNC SEPARATER
VCC
VOLTAGE COMPARATOR
RESET
TRIGGER
CLR
S
GND
AKP-081
RF MOD.

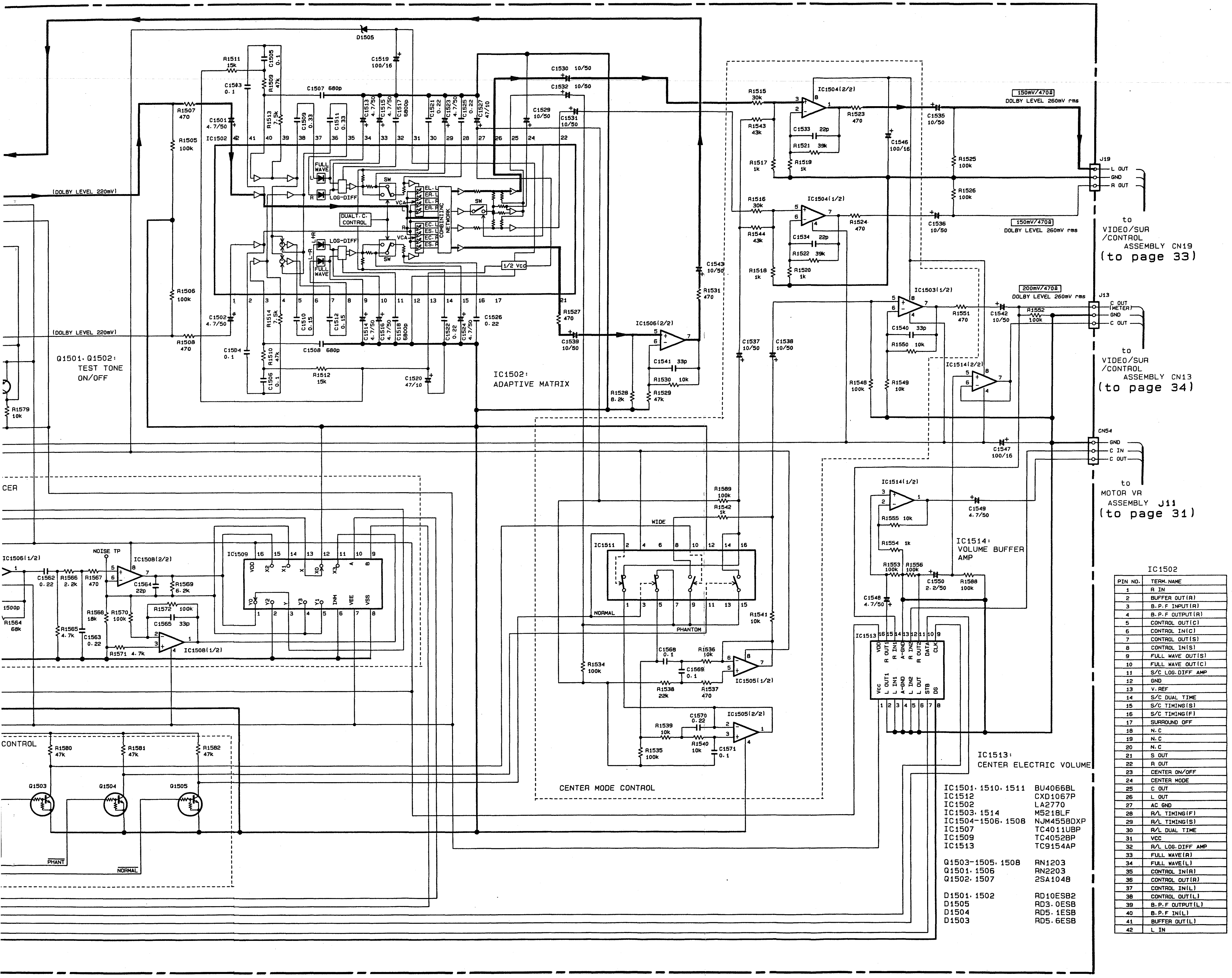
to © (to page 36)


VSX-9500S/KUC, SD/G) (AWZ2520: VSX-7500S/KUC, SD/G)
ADAPTOR
OUT IN
Q301, Q302: BUFFER AMP
IC301, 302, 304 CX-894
IC371 HA17555PS
IC341 NJM2209S
IC303, 305, 306, 309 NJM2233BS
IC307 NJM2235S
IC308 UPC78L05
Q310, 313-316 RN1203
Q309 RN2201
Q301, 304, 305, Q308, 373, 375 2SA1048
Q302, 303, 306, 307, Q311, 341-344, 346, Q371, 372, 374, 376 2SC2458
D371, 372, 374-377 1SS252
Q343, Q344: Y.C MIX
IC341: ENHANCER
Q342: BUFFER
Q341: BUFFER
CLAMP (SINK CHIP)
LOWER LIMITER1
DIFFERENTIAL CONTROL AMP.
LOWER LIMITER2
ADDITION AMP.
LPF
SWITCH CONTROL
IC305: ADAPTOR ON/OFF
3.58MHz TRAP FILTER
CROMA BANDPASS FILTER
Q376: BUFFER
Q346: BUFFER
IC306
ENHANCER
SPLIT SCREEN
SYNC SEPARATER
Q374: START PULSE
IC371: SPLIT SCREEN CONTROL
VCC
VOLTAGE COMPARATOR
RESET
TRIGGER
THRESHOLD
CONTROL
DISCHARGE
FLIPFLOP
OUTPUT
GND
REC SELECTOR
IC309: VCR2 REC SELECTOR
IC307: ENHANCER ON/OFF & SPLIT SCREEN SWITCH
IC307
Q311: BUFFER
IC308
IC308: VOLTAGE REGURATOR
Q309, Q310: RF CONVERTER ON/OFF
+5
+12
GND
RF MOD.
YO
MOD.
to VIDEO/SUR /CONTROL ASSEMBLY (1/2) (to page 36)
4
5
6
7
8
A
B
C
D

3.7 PRO LOGIC assembly (AWX1025)

(VSX-9500S type only)


PRO LOGIC ASSEMBLY (AWX1025)
IC1510: SURROUND OUTPUT SWITCH
C1545 10/50
IC1510
VDD
VSS
C1544 10/50
R1533 100k
R1532 100k
R1504 15k
R1502 2.2k
IC1501
IC1501: TEST TONE SWITCH
(DOLBY LEVEL 220mV)
R1573 1k
R1574 1k
Q1501
Q1502
R1578 220k
R1577 10k
R1579 10k
Q1501, Q1502: TEST TONE ON/OFF
150mV/10kΩ
DOLBY LEVEL 260mV rms
J12
S OUT
S IN
R IN
GND
L IN
GND
-15V
+15V
R1503 15k
R1501 2.2k
to VIDEO/SUR /CONTROL ASSEMBLY CN12
(to page 33)
D1505
R1511 15k
C1503 0.1
C1505 0.1
R1509 47k
C1519 100/16
C1507 680p
R1507 470
C1501 4.7/50
R1513 7.5k
C1509 0.33
C1511 0.33
C1513 4.7/50
C1515 4.7/50
C1517 6800p
C1521 0.22
C1523 4.7/50
C1525 0.22
C1527 47/10
C1530 10/50
C1532 10/50
C1529 10/50
C1531 10/50
R1505 100k
IC1502
FULL WAVE
LOG-DIFF
SW
VCA
DUAL T.C. CONTROL
EL·L
ER·L
EL·R
ER·R
EC·L
ES·L
EC·R
ES·R
COMBINING NETWORK
1/2 Vcc
R1506 100k
C1502 4.7/50
R1514 5k
C1510 0.15
C1512 0.15
C1514 4.7/50
C1516 4.7/50
C1518 6800p
C1522 0.22
C1524 4.7/50
C1526 0.22
R1508 470
C1504 0.1
R1510 47k
C1506 0.1
C1508 680p
R1512 15k
C1520 47/10
R1527 470
C1539 10/50
IC1502: ADAPTIVE MATRIX
IC1506(2/2)
C1541 33p
R1530 10k
R1528 8.2k
R1529 47k
C1543 10/50
R1531 470
R1515 30k
R1543 43k
C1533
R1521
R1517 1k
R1519 1k
R1516 30k
R1544 43k
C1534
R1522
R1518 1k
R1520 1k
C1537 10/50
C1538 10/50
NOISE SEQUENCER
TEST ON
C1552 4700p
C1551 4700p
D1504
C1557 100/16
IC1507
C1559 0.01
R1562 470
IC1506(1/2)
C1562 0.22
R1566 2.2k
R1567 470
NOISE TP
IC1508(2/2)
C1564 22p
R1569 6.2k
C1561 1500p
R1563 220
R1564 68k
R1565 4.7k
R1568 18k
C1563 0.22
R1570 100k
R1572 100k
C1565 33p
R1571 4.7k
IC1508(1/2)
Q1508
R1560 1M
NP
C1558 1/50
R1561 22k
C1560 10/50
IC1509
D1501
C1553 330/16
C1555 47/10
C1554 330/16
C1556 47/10
D1502
J20
STB
DATA
CLK
DG
STB.C
D1503
C1567 2200p
C1566 10/50
SURROUND CONTROL
Q1506
Q1507
R1586 220k
R1585 10k
R1587 10k
IC1512
R1580 47k
R1581 47k
R1582 47k
Q1503
Q1504
Q1505
WIDE
PHANT
NORMAL
to VIDEO/SUR /CONTROL ASSEMBLY CN20
(to page 36)
R1589 100k
R1542 1k
WIDE
IC1511
NORMAL
PHANTOM
R1541 10k
R1534 100k
C1568 0.1
R1536 10k
C1569 0.1
R1538 22k
R1537 470
IC1505(1/2)
C1570 0.22
IC1505(2/2)
R1539 10k
R1540 10k
R1535 100k
C1571 0.1
CENTER MODE CONTROL
1
2
3
4
5
6
A
B
C
D


4
5
6
7
8
9
A
B
C
D
D1505
C1519 100/16
R1511 15k
C1505 0.1
C1503 0.1
R1509 47k
C1507 680p
C1530 10/50
C1532 10/50
C1529 10/50
C1531 10/50
R1507 470
R1505 100k
C1501 4.7/50
R1513 7.5k
C1509 0.33
C1511 0.33
C1513 4.7/50
C1515 4.7/50
C1517 680p
C1521 0.22
C1523 4.7/50
C1525 0.22
C1527 47/10
IC1502
FULL WAVE
LOG-DIFF
SW
VCA
COMBINING NETWORK
DUAL T.C. CONTROL
1/2 Vcc
EL.L
ER.L
ER.R
EL.R
ES.L
EC.L
EC.R
ES.R
L-R
L+R
[DOLBY LEVEL 220mV]
R1506 100k
C1502 4.7/50
R1508 470
C1504 0.1
R1514 7.5k
R1510 47k
C1506 0.1
C1510 0.15
C1512 0.15
C1508 680p
R1512 15k
C1514 4.7/50
C1516 4.7/50
C1518 680p
C1522 0.22
C1524 4.7/50
C1520 47/10
C1526 0.22
R1527 470
C1539 10/50
IC1502: ADAPTIVE MATRIX
IC1506(2/2)
C1541 33p
R1530 10k
R1528 8.2k
R1529 47k
C1543 10/50
R1531 470
Q1501, Q1502: TEST TONE ON/OFF
R1579 10k
R1515 30k
R1543 43k
IC1504(2/2)
C1533 22p
R1521 39k
R1523 470
R1517 1k
R1519 1k
C1535 10/50
C1546 100/16
R1516 30k
R1544 43k
IC1504(1/2)
C1534 22p
R1522 39k
R1524 470
R1518 1k
R1520 1k
C1536 10/50
R1525 100k
R1526 100k
150mV/470Ω
DOLBY LEVEL 260mV rms
J19
L OUT
GND
R OUT
to VIDEO/SUR /CONTROL ASSEMBLY CN19 (to page 33)
IC1503(1/2)
C1540 33p
R1550 10k
R1551 470
C1542 10/50
R1552 100k
200mV/470Ω
J13
C OUT (METER)
GND
C OUT
to VIDEO/SUR /CONTROL ASSEMBLY CN13 (to page 34)
C1537 10/50
C1538 10/50
R1548 100k
R1549 10k
IC1514(2/2)
CN54
GND
C IN
C OUT
C1547 100/16
to MOTOR VR ASSEMBLY J11 (to page 31)
IC1514(1/2)
R1555 10k
R1554 1k
C1549 4.7/50
IC1514: VOLUME BUFFER AMP
R1553 100k
R1556 100k
C1550 2.2/50
R1588 100k
C1548 4.7/50
IC1513
VDD
R OUT1
R IN1
A-GND
R IN2
R OUT2
DATA
CLK
Vcc
L OUT1
L IN1
L IN2
L OUT
STB
DG
IC1513: CENTER ELECTRIC VOLUME
CENTER MODE CONTROL
IC1511
WIDE
NORMAL
PHANTOM
R1589 100k
R1542 1k
R1541 10k
R1534 100k
C1568 0.1
R1536 10k
C1569 0.1
R1538 22k
R1537 470
IC1505(1/2)
IC1505(2/2)
R1539 10k
C1570 0.22
R1540 10k
C1571 0.1
R1535 100k
CER
IC1506(1/2)
NOISE TP
IC1508(2/2)
C1562 0.22
R1566 2.2k
R1567 470
C1564 22p
R1569 6.2k
R1572 100k
C1565 33p
R1568 18k
R1570 100k
R1565 4.7k
C1563 0.22
R1571 4.7k
IC1508(1/2)
1500p
R1564 68k
IC1509
VDD
VEE
VSS
INH
CONTROL
R1580 47k
R1581 47k
R1582 47k
Q1503
Q1504
Q1505
PHANT
NORMAL

IC1513:
CENTER ELECTRIC VOLUME

IC1501, 1510, 1511	BU4066BL
IC1512	CXD1067P
IC1502	LA2770
IC1503, 1514	M5218LF
IC1504–1506, 1508	NJM4558DXP
IC1507	TC4011UBP
IC1509	TC4052BP
IC1513	TC9154AP
Q1503–1505, 1508	RN1203
Q1501, 1506	RN2203
Q1502, 1507	2SA1048
D1501, 1502	RD10ESB2
D1505	RD3.0ESB
D1504	RD5.1ESB
D1503	RD5.6ESB

IC1502

PIN NO.	TERM. NAME
1	R IN
2	BUFFER OUT(R)
3	B.P.F INPUT(R)
4	B.P.F OUTPUT(R)
5	CONTROL OUT(C)
6	CONTROL IN(C)
7	CONTROL OUT(S)
8	CONTROL IN(S)
9	FULL WAVE OUT(S)
10	FULL WAVE OUT(C)
11	S/C LOG.DIFF AMP
12	GND
13	V.REF
14	S/C DUAL TIME
15	S/C TIMING(S)
16	S/C TIMING(F)
17	SURROUND OFF
18	N.C
19	N.C
20	N.C
21	S OUT
22	R OUT
23	CENTER ON/OFF
24	CENTER MODE
25	C OUT
26	L OUT
27	AC GND
28	R/L TIMING(F)
29	R/L TIMING(S)
30	R/L DUAL TIME
31	VCC
32	R/L LOG.DIFF AMP
33	FULL WAVE(R)
34	FULL WAVE(L)
35	CONTROL IN(R)
36	CONTROL OUT(R)
37	CONTROL IN(L)
38	CONTROL OUT(L)
39	B.P.F OUTPUT(L)
40	B.P.F IN(L)
41	BUFFER OUT(L)
42	L IN

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

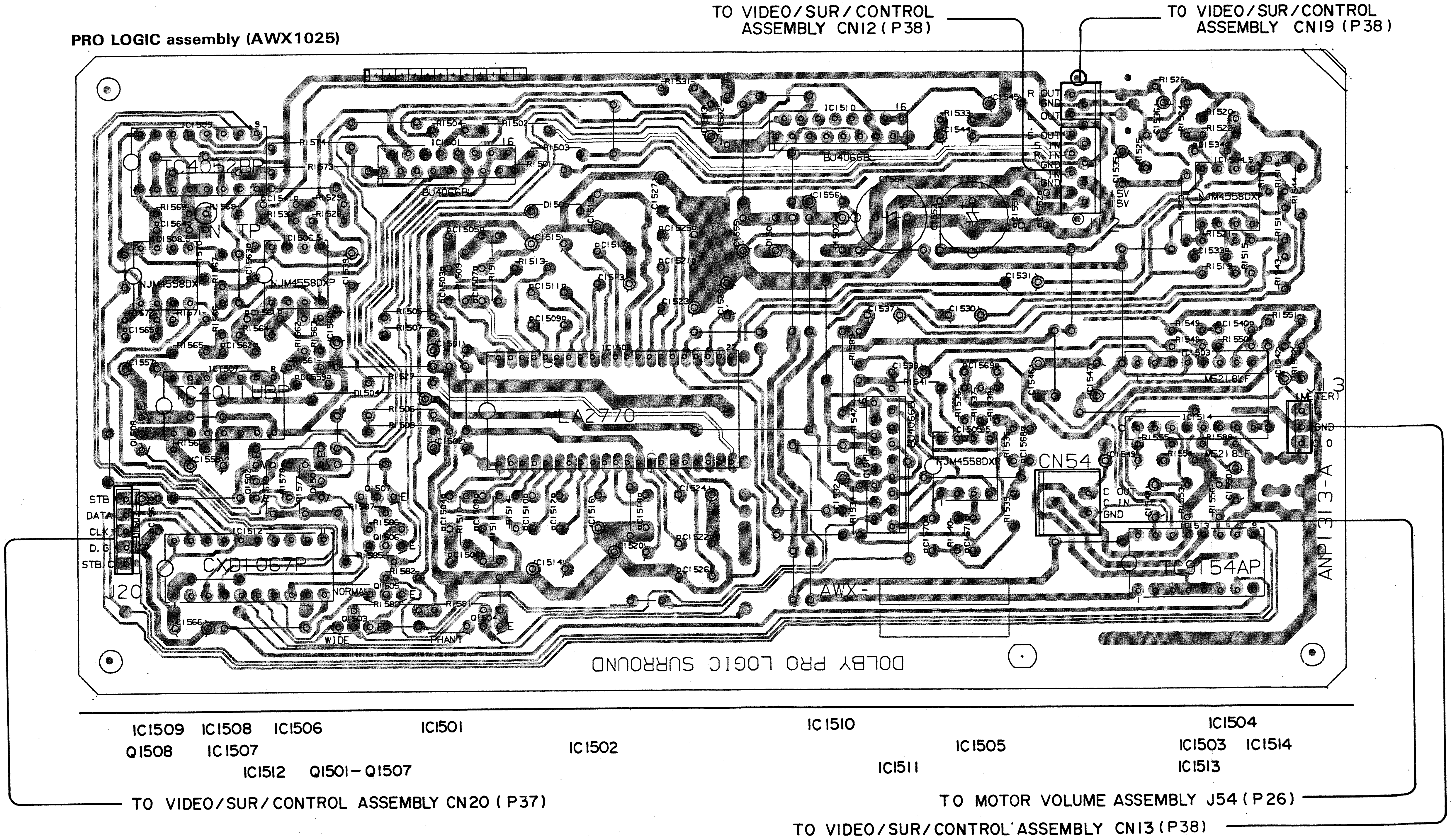
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E○ Q504 ○ ○	E○ ○ ○ or E○ ○ ○	Transistor
Q215 ○ ○ ○	○ ○ ○ or ○ ○ ○	Radiator type transistor
◎ D203 ○	D203 ○—▶|—○	Diode
○ R237 ○	R237 ○—WW—○	Resistor
◎ C513 ○	○—‖—○ +	Capacitor (Polarity)
C518	○—‖—○	Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

PRO LOGIC assembly (AWX1025)


TC4052BP
BU4066BP
BU4066B
NJM4558DXP
TC4011UBP
LA2770
CXD1067P
M5218LF
TC9154AP
CN54
J20
STB
DATA
CLK
D.G
STB.C
R OUT
GND
L OUT
METER
C OUT
C IN
NORMAL
WIDE
PHANT
ANP1313-A
AWX-
DOLBY PRO LOGIC SURROUND
IC1509 IC1508 IC1506
Q1508 IC1507
IC1512 Q1501－Q1507
IC1501
IC1502
IC1510
IC1511
IC1505
IC1504
IC1503 IC1514
IC1513

TO VIDEO/SUR/CONTROL ASSEMBLY CN12 (P38)

TO VIDEO/SUR/CONTROL ASSEMBLY CN19 (P38)

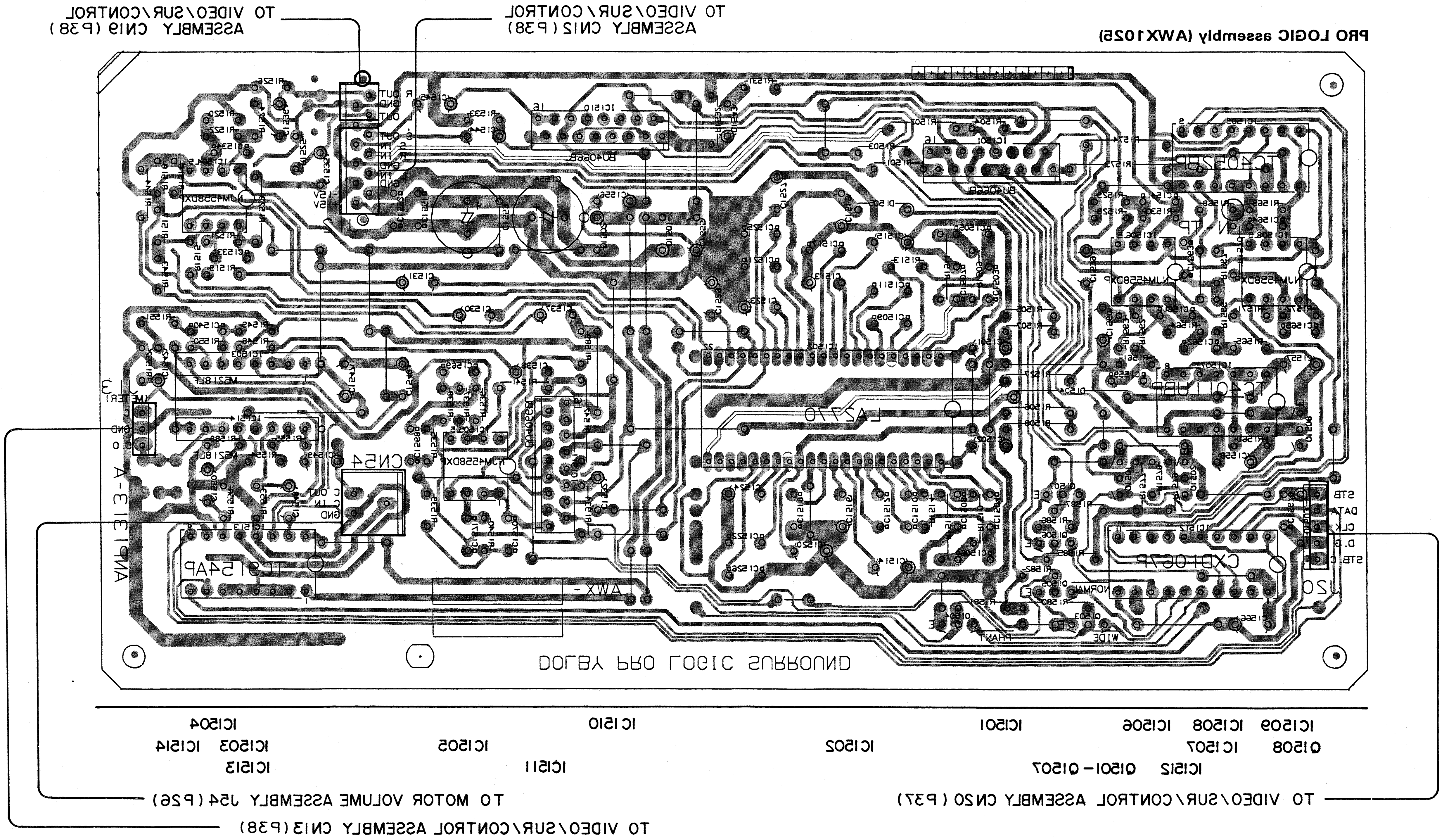
TO VIDEO/SUR/CONTROL ASSEMBLY CN20 (P37)

TO MOTOR VOLUME ASSEMBLY J54 (P26)

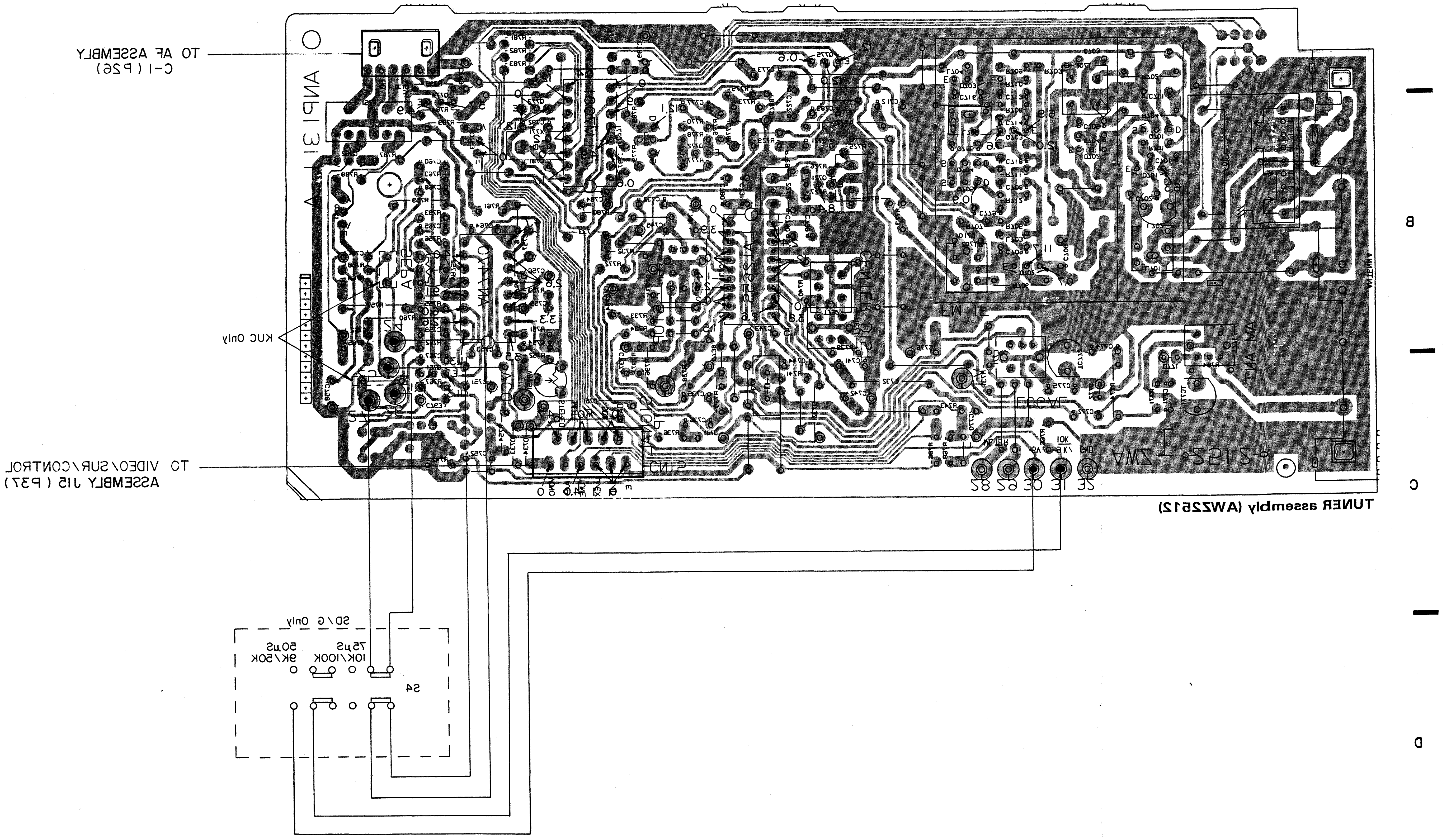
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)

NOTE:
This picture shows the foil side of the printed circuit.

PRO LOGIC assembly (AWX1025)

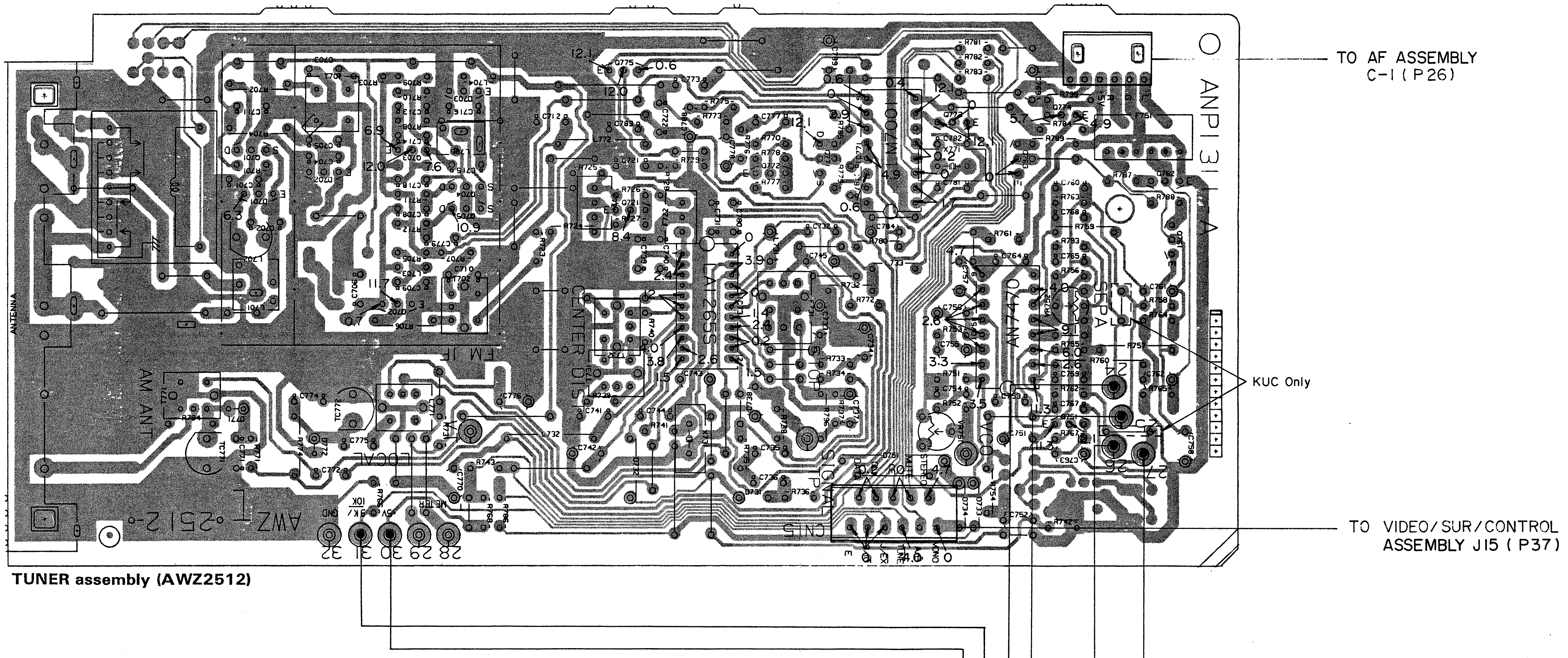

TO VIDEO/SUR/CONTROL ASSEMBLY CN19 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY CN12 (P38)
DOLBY PRO LOGIC SURROUND
AWX-
LA2770
CN54
TC9154AP
CXD1067P
TC4011UBP
TC4012BP
BU4066B
NJM4558DXP
M5218L
ANP1613-A
R OUT
GND
L OUT
C OUT
C IN
STB
DATA
CLK
D.G
NORMAL
PHANT
WIDE
IC1504
IC1503 IC1514
IC1513
IC1510
IC1505
IC1511
IC1502
IC1501
IC1509 IC1508 IC1506
Q1508 IC1507
IC1512 Q1501-Q1507
TO MOTOR VOLUME ASSEMBLY J54 (P26)
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (P38)
TO VIDEO/SUR/CONTROL ASSEMBLY CN20 (P37)

3.8 TUNER assembly (AWZ2512)

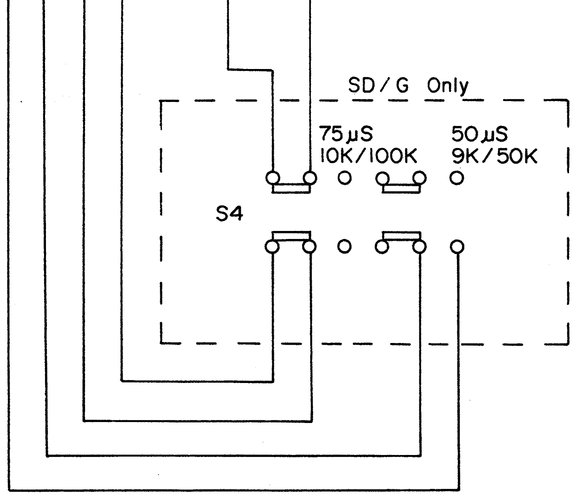

TO AF ASSEMBLY
C-1 (P26)
TO VIDEO/SUR/CONTROL
ASSEMBLY J15 (P37)
KUC Only
ANTENNA
AM ANT
SD/G Only
75μs
10K/100K
50μs
9K/50K
S4
GND
10K
32
31
30
29
28

TUNER assembly (AWZ2512)

3.8 TUNER assembly (AWZ2512)

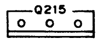
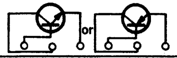
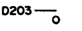
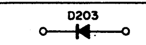
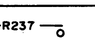
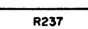
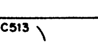
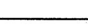
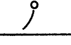
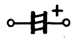
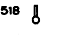
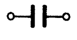

TO AF ASSEMBLY
C-1 (P26)
TO VIDEO/SUR/CONTROL
ASSEMBLY J15 (P37)
KUC Only
ANTENNA
AM ANT
FM IF
CENTER DIS
LA1265
AN7470
SEPA
ANPI 31
AWZ 2512
GND
10K
9K
5V
METER
32
31
30
29
28

TUNER assembly (AWZ2512)


SD/G Only
75μS
10K/100K
50μS
9K/50K
S4

NOTE

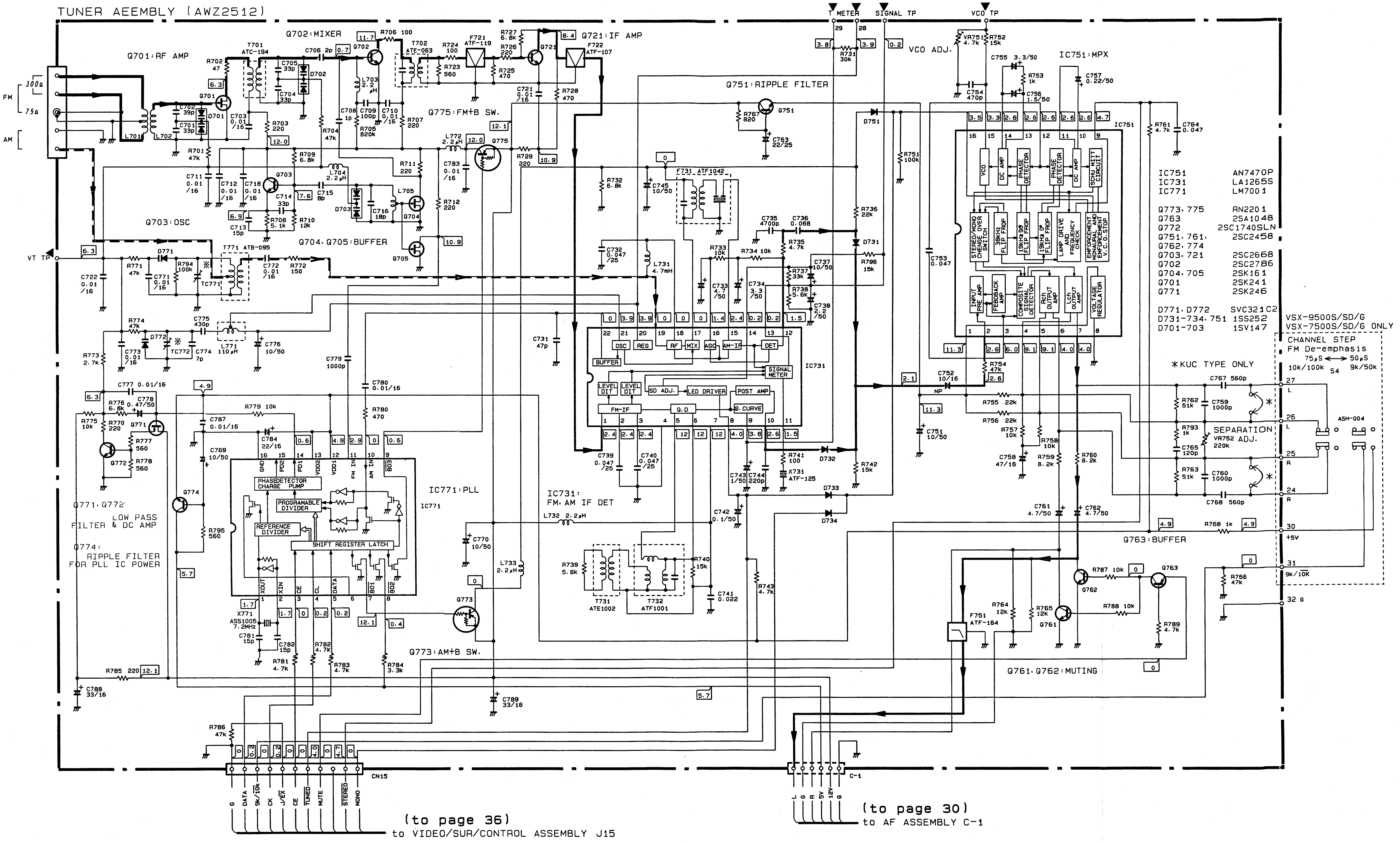
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


TUNER AEEMBLY (AWZ2512)
Q701:RF AMP
Q702:MIXER
Q721:IF AMP
Q775:FM+B SW.
Q751:RIPPLE FILTER
IC751:MPX
Q703:OSC
Q704, Q705:BUFFER
IC731:FM, AM IF DET
IC771:PLL
Q773:AM+B SW.
Q771, Q772: LOW PASS FILTER & DC AMP
Q774: RIPPLE FILTER FOR PLL IC POWER
Q763:BUFFER
Q761, Q762:MUTING
T METER
SIGNAL TP
VCO TP
VCO ADJ.
VT TP
FM 300Ω 75Ω
AM
SEPARATION VR752 ADJ.
*KUC TYPE ONLY
CHANNEL STEP
FM De-emphasis
75μS ⟷ 50μS
10k/100k S4 9k/50k
VSX-9500S/SD/G
VSX-7500S/SD/G ONLY
IC751 AN7470P
IC731 LA1265S
IC771 LM7001
Q773, 775 RN2201
Q763 2SA1048
Q772 2SC1740SLN
Q751, 761, Q762, 774 2SC2458
Q703, 721 2SC2668
Q702 2SC2786
Q704, 705 2SK161
Q701 2SK241
Q771 2SK246
D771, D772 SVC321C2
D731-734, 751 1SS252
D701-703 1SV147
CN15
G DATA 9k/10k CK J/EX CE TUNED MUTE STEREO MONO
(to page 36)
to VIDEO/SUR/CONTROL ASSEMBLY J15
C-1
L G R 5V 12V G
(to page 30)
to AF ASSEMBLY C-1
1 2 3 4 5 6
A B C D

4. ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω 56 × 10¹ 561..........................RD1/4PS $\boxed{5}$ $\boxed{6}$ $\boxed{1}$ J
47kΩ 47 × 10³ 473..........................RD1/4PS $\boxed{4}$ $\boxed{7}$ $\boxed{3}$ J
0.5Ω 0R5..RN2H $\boxed{0}$ $\boxed{R}$ $\boxed{5}$ K
1Ω 010..RS1P $\boxed{0}$ $\boxed{1}$ $\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ 562 × 10¹ 5621........................RN1/4SR $\boxed{5}$ $\boxed{6}$ $\boxed{2}$ $\boxed{1}$ F

Miscellaneous parts

P.C.BOARD ASSEMBLIES

Mark	Symbol & Description	Part No.
	HEAD PHONE assembly	
	FUSE assembly	
	AF assembly	AWZ2507
	MOTOR VOL assembly	AWZ2509
	VIDEO/SUR/CONTROL assembly	AWZ2511
	TUNER assembly	AWZ2512
	FRONT CONTROL A assembly	AWZ2513
	FRONT CONTROL B assembly	AWZ2514
	METER AMP assembly	AWZ2515
	REAR AMP assembly	AWZ2516
	VOL IND assembly	
	S TERM./CENTER SP assembly	AWK1219
	PRO LOGIC assembly	AWX1025

OTHERS

Mark	Symbol & Description	Part No.
⚠	Q7,Q8,Q10 Transistor	2SA1263N
⚠	Q3,Q4 Transistor	2SA1302
⚠	Q5,Q6,Q9 Transsistor	2SC3180N
⚠	Q1,Q2 Transistor	2SC3281
⚠	Power transformer (AC120V)	ATS1205
⚠	S1 Speaker impedamce selector switch	AKX1004
⚠	FU3,FU4 Fuse (6.3A/125V)	AEK−109
⚠	FU5,FU6 Fuse (1.25A/125V)	AEK−120
⚠	FU1 Fuse (10A/125V)	AEK−310
⚠	3P AC Outlet	AKP−515
⚠	AC Power cord	ADG1031
	Jumper plug	AKM1019

HEAD PHONE assembly

Mark	Symbol & Description	Part No.
	Jack (HEAD PHONE)	AKN1002

FUSE assembly

No parts are supplied with the FUSE assembly

AF assembly (AWZ2507)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC505	M5F79M15L
	IC153	M5201P
	IC151,IC152	M5218LF
	IC165	M5220L
	IC51	M5220P
	IC104	NJM4558DXP
	IC504	NJM78M56FA
	IC201,IC202	PA0016
	IC167	TC9154AP
	IC103	TC9162N
	IC105	TC9163N
	IC101,IC102	TC9164N
	IC168	TC9184P
	IC503	UPC78M05H
	IC502	UPC78M15H
	IC501	UPC7812H
	Q151,Q501,Q508,Q509,Q511	RN1201
	Q512	2SA1048
	Q207,Q208	2SA1145
	Q213,Q214	2SA1306
	Q201,Q202	2SA979
	Q205,Q206,Q215,Q216,Q507	2SC2240
	Q101,Q102,Q502,Q503,Q505, Q506,Q513	2SC2458
	Q209,Q210	2SC2705
	Q211,Q212	2SC3298
	D514	D5SB20F
	D217 Zener diode	RD24EB
	D512 Zener diode	RD4.7ESB
	D165,D166 Zener diode	RD5.1ESB2
	D527 Zener diode	RD5.6ESB2
	D526 Zener diode	RD9.1EB
	D167,D168,D201−D216,D218, D219,D501−D505,D507,D515, D516,D521−D525,D528,D529, D531,D535	1SS252
	D508−D511,D517−D520	11E2
	D513	4D4B44

COILS & TRANSFORMERS

Mark	Symbol & Description	Part No.
	L201,L202 AF choke coil (0.7μH)	ATH1004
	L601,L602 AF choke coil (0.7μH)	ATH1011
	T501 Power transformer	ATT1015

RELAIES

Mark	Symbol & Description	Part No.
	RY503,RY504 Relay	ASR−112
	RY501 Relay	ASR−512
	RY502,RY505 Relay	ASR1005

CAPACITORS

Mark	Symbol & Description	Part No.
	C515−C517 (0.01μF/AC125V)	ACG1003
	C503,C504 (8200μF/DC80)	ACH1106
	C505,C506 (6800μF/DC42)	ACH1110
	C229	CCCSL020C500
	C215,C216	CCCSL101K500
	C225,C226	CCCSL151J50
	C230	CCDSL020C500
	C217,C218	CCDSL101K500
	C171,C172	CCDSL680K500
	C65−C70,C101−C114	CCMSL101J50
	C211−C214	CCMSL680J50
	C219,C220	CEANP2R2M50
	C64,C169,C170,C518,C523, C524,C526	CEAS010M50
	C231−C234	CEAS100M100
	C51,C52,C179,C180,C508, C509,C512	CEAS100M25
	C521,C527	CEAS100M50
	C510	CEAS102M25
	C514	CEAS102M35
	C61,C62,C115−C118,C121, C122,C151,C152,C154,C157, C161,C162,C167,C168	CEAS2R2M50
	C201,C202,C227	CEAS220M50
	C502	CEAS221M10
	C513	CEAS222M35
	C153	CEAS470M16
	C55,C56,C209,C210,C501	CEAS471M6
	C522,C525	CEHAQ010M50
	C507,C511	CEHAQ470M25
	C221−C224,C613,C614	CFTXA104J50
	C123,C124,C177,C178,C181, C182	CFTXA153J50
	C57,C58	CFTXA243J50
	C155	CFTXA333J50
	C59,C60,C183,C184	CFTXA823J50
	C53,C54	CKDYB331K50
	C125,C126,C173,C174,C520	CKDYF103Z50
	C519	CKDYF473Z50
	C63	CKDYX104M25
	C205,C206	CKDYB471K50
	C158	CKMYF222Z50
	C207,C208	CMA270J500
	C203,C204	CQMA152K50
	C175,C176	CQMA272J50
	C156	CQMA332J50
	C119,C120	CQMA392K50
	C191,C192	CQMA472J50

RESISTORS

Mark	Symbol & Description	Part No.
	R508 (2.2M, 1/2W)	ACN−209
	R259,R260 (0.27, 5W × 2)	ACN1018
	R217,R218	RDR1/2PM123J
	R201−R204	RDR1/4PM□□□J
	R211−R216,R239−R246 R251−R258,R261−R264, R516−R518,R543,R544,R546, R547,R621−R624	RD1/4PMF□□□J
	R207−R210,R219−R224	RD1/4PM□□□J
	R231−R234,R247−R250	RFA1/4PS□□□J
	R269−R272	RS1LMF100J
	R277,R541,R542	RS2LMF□□□J
	R505,R506	RS3LMF□□□J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	6P Pin jack (TAPE 2, VIDEO, TV, VDP, VCR 1−3, PRE OUT, POWER)	AKB1008
	6P Pin jack (TAPE 1, LINE)	AKB1024
	2P Pin jack (TUNER)	AKB1039
	2P Pin jack (PHONO)	AKB1059

Mark	Symbol & Description	Part No.
	C757	CEASR22M50
	C778	CEASR47M50
	C742	CEAS0R1M50
	C743	CEAS010M50
	C756	CEAS1R5M50
	C737,C745,C751,C769,C770, C776	CEAS100M50
	C738	CEAS2R2M50
	C784	CEAS220M16
	C763	CEAS220M25
	C734,C755	CEAS3R3M50
	C788,C789	CEAS330M16
	C733,C761,C762	CEAS4R7M50
	C758	CEAS470M16
	C736	CFTXA683J50
	C703,C710−C712,C718,C721, C722,C771−C773,C777,C780, C783,C787	CGMYX103M16
	C735	CKCYB472K50
	C753,C764	CKCYF473Z50
	C732,C739,C740	CKCYX473M25
	C741	CKDYF223Z50
	C779	CKMYB102K50
	C759,C760	CQMA102J50
	C767,C768	CQMA561K50
	C775	CQSA431J50
	C754	CQSA471J50

RESISTORS

Mark	Symbol & Description	Part No.
	R752	RN1/4PC1502F
	VR752 Semi−fixed resistor (220k)	VRTB6VS224
	VR751 Simi−fixed resistor (4.7k)	VRTB6VS472
	Other resistors	RD1/8PM☐☐☐J

OTHER

Mark	Symbol & Description	Part No.
	4P Antenna terminal	AKA1003
	X771 Crystal resonator (7.2MHz)	ASS1005
	X731 Ceramic resonator (450kHz)	ATF−125
	CN15 11P Jumper connecter	KPE11

FRONT CONTROL A assmbly (AWZ2513)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC801	PDG041
	Q801	RN1203
	Q812	RN2203
	Q802−Q811	2SC2458
	D801−D817	1SS252

COIL

Mark	Symbol & Description	Part No.
	L801 Axial inductor (10μH)	LAU100K

SWITCHES

Mark	Symbol & Description	Part No.
	S815−S822,S825,S827−S830, S838−S844,S846−S849, S852−S855,S857−S860,S863, S864 Tact switch	ASG−711
	S801−S814,S826,S834−S837, S845,S850,S851,S856,S861, S862,S865	ASG1029

CAPACITORS

Mark	Symbol & Description	Part No.
	C801,C802	CCDCH101J50
	C807	CEJA0R1M50
	C803,C805,C806	CEJA100M16

RESISTORS

Mark	Symbol & Description	Part No.
	VR802 Variable resistor (10k)	ACS1021
	VR801 Variable resistor (10k)	ACS1022
	Other resistors	RD1/8PM☐☐☐J

OTHERS

Mark	Symbol & Description	Part No.
	V801 Fluorescent indicator tube	AAV1080
	X801 Seramic oscillator (503kHz)	ASS1004
	REMOCON REC unit	AXX1010

FRONT CONTROL B assembly (AWZ2514)

SWITCHES

Mark	Symbol & Description	Part No.
	S823,S824,S831−S833,S866, S867 Tact switch	ASG1029

METER AMP assembly (AWZ2515)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC631−IC633	M5218LF
	Q631−Q635	2SC2458
	D641−D645 Zener diode	RD5.6ESB3
	D636−D640	1SS252

CAPACITORS

Mark	Symbol & Description	Part No.
	C631−C635	CEASR47M50

Mark	Symbol & Description	Part No.
	C430,C467	CEAS220M16
	C447−C450,C466,C468,C469	CEAS4R7M50
	C301−C305,C307−C311, C315−C319,C323,C324,C359, C364,C368,C370,C384,C403, C415	CEAS470M16
	C417	CEAS471M10
	C421	CEJA100M16
	C401	CFTXA103J50
	C404,C407,C433	CFTXA104J50
	C459,C460	CFTXA183J50
	C432,C439	CFTXA333J50
	C413,C414	CFTXA823J50
	C369,C394	CGMYX103M16
	C376	CKCYB103K50
	C347	CKCYB472K50
	C411	CKCYF473Z50
	C372	CKCYX104M25
	C471	CKDYB103K50
	C470	CKDYX223M25
	C436	CKMYB471K50
	C431	CQMA472K50
	C406,C409,C458	CQMA562K50
	C423,C428	CQMA682K50
	C405,C410	CQSA561J50
	C377	CQSA821J50

RESISTORS

Mark	Symbol & Description	Part No.
	VR421 (100k)	ACS1020
	VR422 (22k)	VRTB6VS223
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	1P Pin jack (VCR 1)	AKB1010
	3P Pin jack (VDP, TV, VIDEO)	AKB1050
	6P Pin jack (VCR 2, ADAPTOR, VCR 3)	AKB1058
	6P Pin jack (REAR,CENTER)	AKB1093
	2P Mini jack (REMOTE)	AKN1006
	5P DIN socket (RF MOD)	AKP−081
	X401 Ceramic resonator (3.27MHz)	ASS1016
	X391 Ceramic resonator (4.19MHz)	ASS1022
	CN13 3P Jumper connecter	KPC3
	CN20 5P Jumper connecter	KPC5
	CN6 10P Jumper connecter	KPE10
	CN9,CN11 12P Jumper connecter	KPE12
	CN5,CN10 15P Jumper connecter	KPE15
	CN19 3P Jumper connecter	KPE3
	CN12 8P Jumper connecter	KPE8

TUNER assembly (AWZ2512)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC751	AN7470P
	IC731	LA1265S
	IC771	LM7001
	Q773,Q775	RN2201
	Q763	2SA1048
	Q772	SC1740SLN
	Q751,Q761,Q762,Q774	2SC2458
	Q703,Q721	2SC2668
	Q702	2SC2786
	Q704,Q705	2SK161
	Q701	2SK241
	Q771	2SK246
	D771,D772	SVC321C2
	D731−D734,D751	1SS252
	D701−D703	1SV147

COILS & TRANSFORMERS

Mark	Symbol & Description	Part No.
	T771 AM antenna transformer	ATB−095
	L771 AM OSC coil (110μH)	ATB−100
	T701 FM RF transformer	ATC−194
	L701 FM coil	ATC1001
	L702 FM coil	ATC1002
	L705 FM coil	ATC1003
	T702 FM coupling transformer	ATE−063
	T732 FM detector transformer	ATE1001
	T731 FM detector transformer	ATE1002
	F722 FM Ceramic filter	ATF−107
	F721 FM Ceramic filter	ATF−119
	F751 Low pass filter	ATF−164
	F731 AM Ceramic filter	ATF1042
	L703,L704,L732,L733,L772 Axial inductor (2.2μH)	LAU2R2M
	L731 Inductor (4.7mH)	LTA472J

CAPACITORS

Mark	Symbol & Description	Part No.
	TC771,TC772	ACM−015
	C708	CCDCH010C50
	C706	CCDCH020C50
	C701,C704,C705	CCDRH330J50
	C702	CCDRH390J50
	C744	CCDSL221J50
	C716	CCDTH180J50
	C774	CCMCH070D50
	C715	CCMCH080D50
	C713,C781,C782	CCMCH150J50
	C714	CCMCH330J50
	C709	CCMSL101J50
	C765	CCMSL121J50
	C731	CCMSL470J50
	C752	CEANP100M16

PRO LOGIC assembly (AWX1025)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC1501,IC1510,IC1511	BU4066BL
	IC1512	CXD1067P
	IC1502	LA2770
	IC1503,IC1514	M5218LF
	IC1504–IC1506,IC1508	NJM4558DXP
	IC1507	TC4011UBP
	IC1509	TC4052BP
	IC1513	TC9154AP
	Q1503–Q1505,Q1508	RN1203
	Q1501,Q1506	RN2203
	Q1502,Q1507	2SA1048
	D1501,D1502 Zener diode	RD10ESB2
	D1505 Zener diode	RD3.0ESB
	D1504 Zener diode	RD5.1ESB
	D1503 Zener diode	RD5.6ESB

CAPACITORS

Mark	Symbol & Description	Part No.
	C1533,C1534,C1564	CCMSL220J50
	C1540,C1541,C1565	CCMSL330J50
	C1513–C1516,C1523,C1524	CEANL4R7M50
	C1558	CEANP010M50
	C1529–C1532,C1535–C1539 C1542–C1545,C1560,C1566	CEAS100M50
	C1519,C1546,C1547,C1557	CEAS101M16
	C1550	CEAS2R2M50
	C1553,C1554	CEAS331M16
	C1501,C1502,C1548,C1549	CEAS4R7M50
	C1520,C1527,C1555,C1556	CEAS470M10
	C1559	CFTXA103J50
	C1503–C1506,C1568,C1569, C1571	CFTXA104J50
	C1510,C1512	CFTXA154J50
	C1521,C1522,C1525,C1526, C1562,C1563,C1570	CFTXA224J50
	C1509,C1511	CFTXA334J50
	C1567	CKDYB222K50
	C1561	CKMYB152K50
	C1551,C1552	CKMYF472Z50
	C1507,C1508	CQMA681J50
	C1517,C1518	CQMA682J50

RESISTORS

Mark	Symbol & Description	Part No.
	All resistors	RD1/8PM☐☐☐J

OTHER

Mark	Symbol & Description	Part No.
	CN54 3P Jumper connecter	KPE3

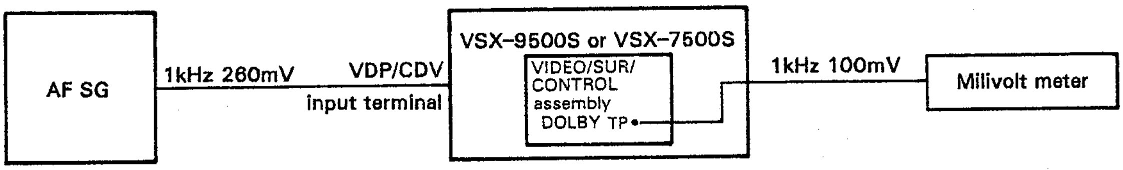
5.2 SURROUND AMP SECTION

• SORRUND LEVEL ADJUSTMENT Preparation

1) Adjust the SURROUND BALANCE VR (VR421) on the rear side to center clicking position.
2) Set the SURROUND MODE to the DOLBY SURROUND (VSX-7500S type)

* Set the SURROUND MODE to the STADIUM (VSX-9500S type)

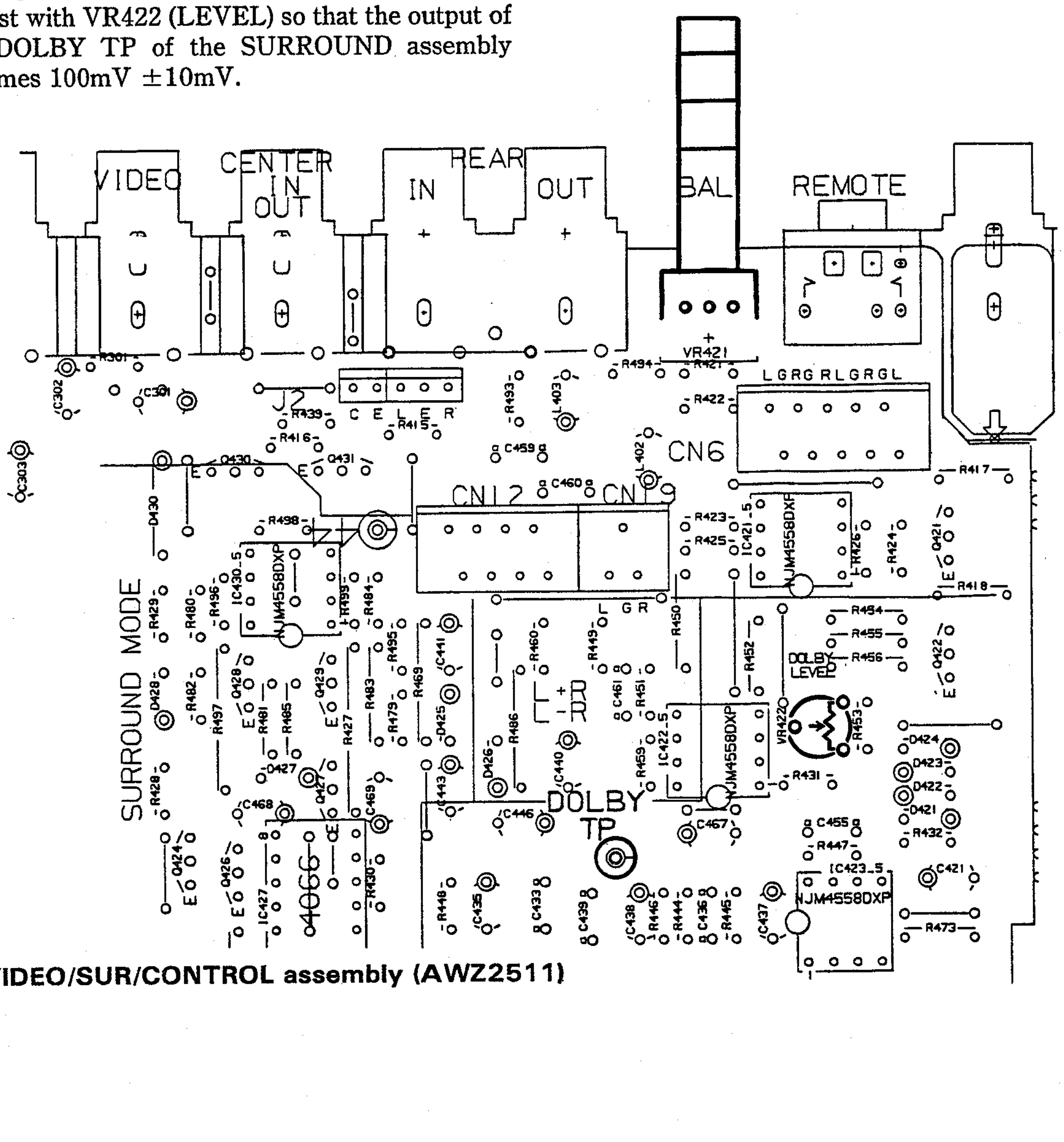
3) Input sine wave signal of 1kHz, 260mV to the VDP/CDV input. Lch (or Rch) only.


AF SG
1kHz 260mV
VDP/CDV
input terminal
VSX-9500S or VSX-7500S
VIDEO/SUR/
CONTROL
assembly
DOLBY TP
1kHz 100mV
Milivolt meter

Connection diagram

Adjusting method

1) Adjust with VR422 (LEVEL) so that the output of TP DOLBY TP of the SURROUND assembly becomes 100mV ±10mV.


VIDEO
CENTER
IN
OUT
REAR
IN
OUT
BAL
REMOTE
VR421
L G R G R L G R G L
CN6
J2
C E L E R
CN12
CN1
SURROUND MODE
NJM4558DXP
IC430_5
4066
IC427
L +R
L −R
DOLBY TP
DOLBY LEVEL
VR422
IC422_5
IC421_5
IC423_5

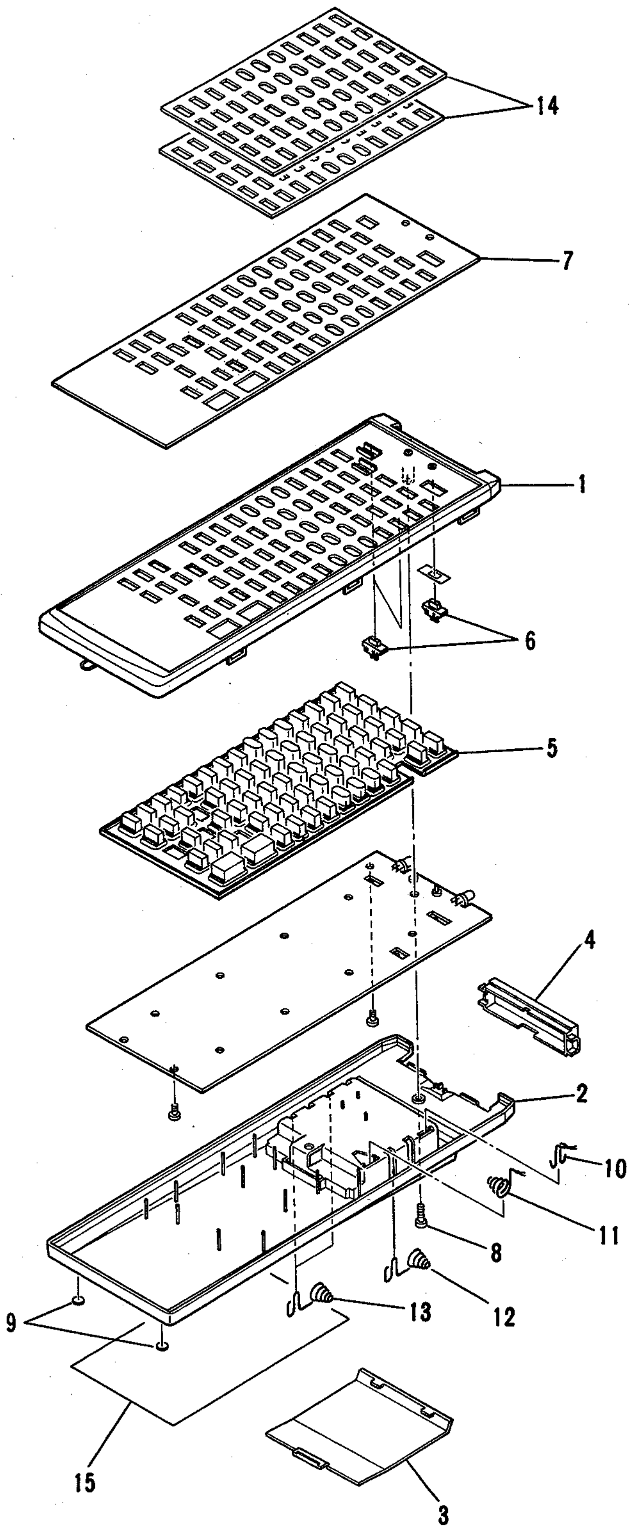
VIDEO/SUR/CONTROL assembly (AWZ2511)

6. REMOTE CONTROL UNIT (AXD1100)

6.1 EXPLODED VIEWS AND PARTS LIST

Parts list of remote control unit

Mark	No.	Parts No.	Description
	1	AZH1033	Case(A)
	2	AZH1034	Case(B)
	3	AZH1035	Case(C)
	4	AZN1400	Filter
	5	AZA1192	Rubber sheet
	6	AZS1042	Knob
	7	AZA1190	Name plate
	8	AZB1124	Screw
	9	AZN1401	Leg
	10	AZB1274	Electrode spring
	11	AZB1275	Electrode spring
	12	AZB1276	Electrode spring
	13	AZB1277	Electrode spring
	14	AAK1439	Sheet
	15	AZA1191	Label



6.2 ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω 56×10^1 561..........................RD1/4PS $\boxed{5}\ \boxed{6}\ \boxed{1}$ J
47kΩ 47×10^3 473..........................RD1/4PS $\boxed{4}\ \boxed{7}\ \boxed{3}$ J
0.5Ω 0R5..RN2H $\boxed{0}\ \boxed{R}\ \boxed{5}$ K
1Ω 010..RS1P $\boxed{0}\ \boxed{1}\ \boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ 562×10^1 5621.........................RN1/4SR $\boxed{5}\ \boxed{6}\ \boxed{2}\ \boxed{1}$ F

SEMCONDUCTORS

Mark	Symbol & Description	Part No.
	IC01	PD5108
	IC02	AZC1045
	IC03	AZC1046
	IC04	AZC1047
	IC05	AZC1048
	Q1,Q2	AZC1050
	Q3,Q4	AZC1051
	Q5	AZC1052
	D01,D02,D07–D15	AZC1233
	D03–D06	AZC1049
	PHD01	AZC1055
	LED01,LED02	AZC1054
	IED01,IED02	AZC1053

SWITCHES

Mark	Symbol & Description	Part No.
	S01,S02 Slide switch	AZC1079
	S04 Slide switch	AZC1081
	S05 Slide switch	AZC1080

CAPACITORS

Mark	Symbol & Description	Part No.
	C01 (220p)	AZC1058
	C02 (33p)	AZC1059
	C05,C06 (20p)	AZC1060
	C08 (0.01μF)	AZC1061
	C03,C04 (0.001μF)	AZC1062
	C11 (0.01μF)	AZC1063
	C10 (100μF)	AZC1251
	C07 (4.7μF)	AZC1252
	C09 (1000μF)	AZC1255

RESISTORS

Mark	Symbol & Description	Part No.
	R01 (8.2k)	AZC1064
	R02 (4.7k)	AZC1065
	R03,R08 (33k)	AZC1066
	R05,R17 (10k)	AZC1068
	R06 (82k)	AZC1069
	R09 (6.8k)	AZC1070
	R10 (56k)	AZC1071
	R12 (1M)	AZC1072
	R07,R11,R30–R38 (100k)	AZC1073
	R19–R21 (2.2k)	AZC1074
	R13,R16 (680Ω)	AZC1075
	R15 (10Ω)	AZC1076
	R18,R22–R29 (47k)	AZC1077
	R14 (3.9Ω)	AZC1078
	R04 (560k)	AZC1256

OTHERS

Mark	Symbol & Description	Part No.
	X01 Resonator	AZC1057

6.3 SCHEMATIC DIAGRAM

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. OTHERS:
➡: Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

The underline indicates the switch position

S01 : AUDIO/VIDEO/AUX
S02 : SR RECALL/USE/LEARN
S03 : DECK I/DECK II
S04 : RESET

TAPE/VCR
S-1 : VCR POWER
S-2 : ● TAPE/VCR
S-3 : ❚❚ TAPE/VCR
S-4 : ○/VCR CH-
S-5 : VCR CH+
S-6 : ◀◀
S-7 : ◀/ANT/TV/VCR
S-8 : ■
S-9 : ▶
S-10 : ▶▶

CD/VDP
S-11 : DISC SEL /DISPLAY CALL
S-12 : ❚❚
S-13 : ⏮ CHP/FR-TM
S-14 : ⏭ /SEARCH
S-15 : PROG
S-16 : ◀◀
S-17 : ■
S-18 : ▶
S-19 : ▶▶

TUNER/CD/TV/VDP
S-20 : 1/13
S-21 : 2/14
S-22 : 3/15
S-23 : 4/16
S-24 : 5/17
S-25 : 6/18
S-26 : 7/19
S-27 : 8/20
S-28 : 9/21
S-29 : 0, 10/22
S-30 : 11/MEMORY/23
S-31 : 12/CLEAR/24

TUNER/CD/PHONO/AMP/TV
S-32 : BAND/DUAL

S-36 : 1·12/13·24/CH-RETURN
S-37 : FREQUENCY-/TV CHANNEL-
S-38 : FREQUENCY+/TV CHANNEL+
S-39 : TV POWER
S-40 : CD+10/TV FUNC CYCLIC
S-41 : PHONO ■/TV VOL-
S-42 : PHONO ▶/TV VOL+
S-43 : AMP DISPLAY/TV DISPLAY
S-44 : VCR 1
S-45 : VCR 2
S-46 : VCR 3
S-47 : VDP
S-48 : TV
S-49 : VIDEO

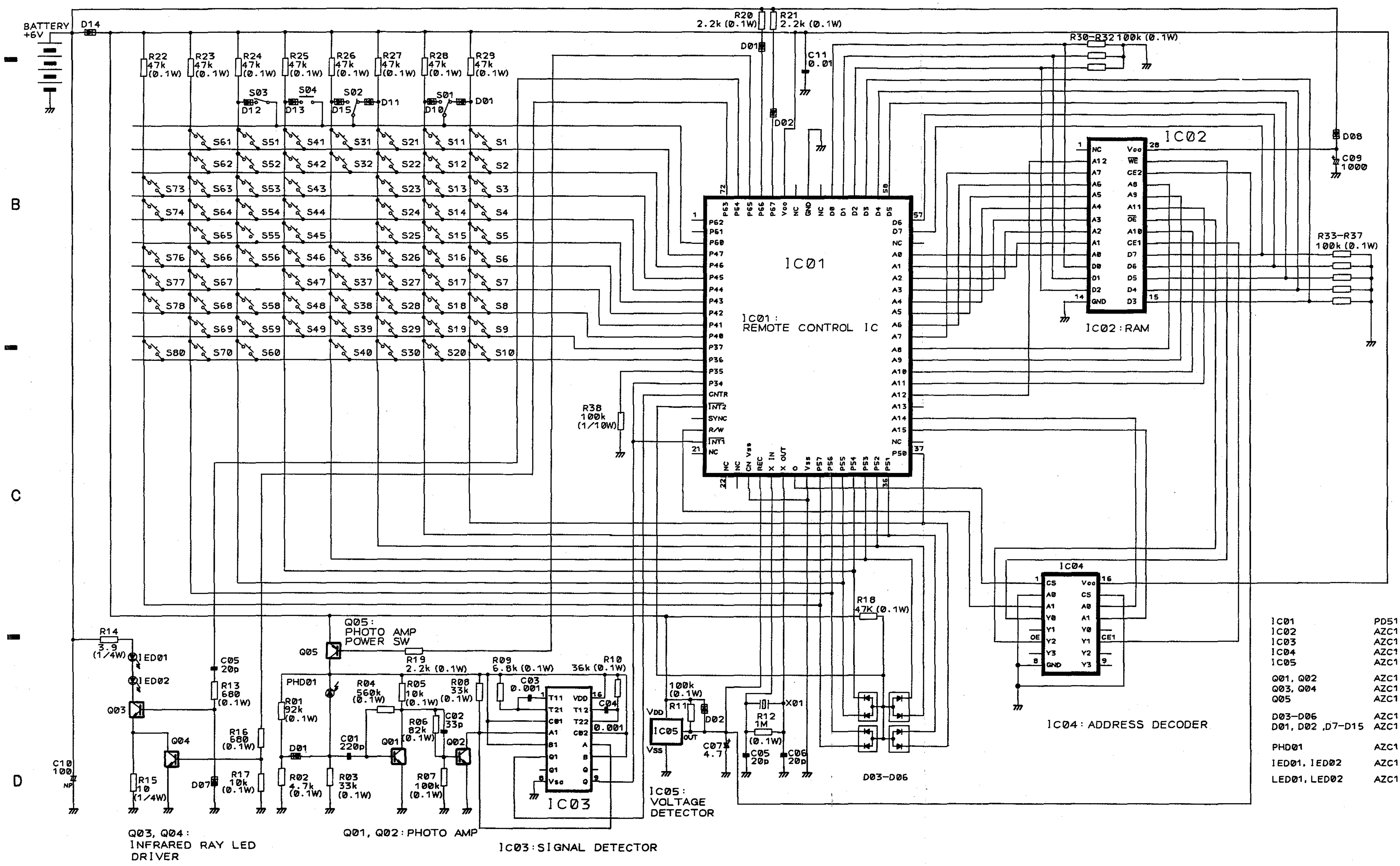
S-51 : TAPE 1/DAT
S-52 : TAPE 2
S-53 : LINE
S-54 : CD
S-55 : TUNER
S-56 : PHONO

S-58 : SLEEP
S-59 : RECEIVER POWER
S-60 : MUTING
S-61 : FRONT BAL.R
S-62 : FRONT BAL.L
S-63 : MASTER VOLUME-
S-64 : MASTER VOLUME+
S-65 : REAR LEVEL-
S-66 : REAR LEVEL+
S-67 : SURROUND MODE
S-68 : SURROUND DELAY TIME
S-69 : REAR BAL.R
S-70 : REAR BAL.L

S-73 : CENTER LEVEL-
S-74 : CENTER LEVEL+

S-76 : ACOUSTIC
S-77 : SP-A
S-78 : SP-B

S-80 : RETURN


BATTERY +6V
D14
R22 47k (0.1W)
R23 47k (0.1W)
R24 47k (0.1W)
R25 47k (0.1W)
R26 47k (0.1W)
R27 47k (0.1W)
R28 47k (0.1W)
R29 47k (0.1W)
S03
S04
S02
S01
D12
D13
D15
D11
D10
D01
R20 2.2k (0.1W)
R21 2.2k (0.1W)
D02
C11 0.01
R30-R32 100k (0.1W)
IC02
D08
C09 1000
R33-R37 100k (0.1W)
IC01
IC01 : REMOTE CONTROL IC
IC02 : RAM
R38 100k (1/10W)
IC04
IC04 : ADDRESS DECODER
R18 47K (0.1W)
D03-D06
R14 3.9 (1/4W)
IED01
IED02
C05 20p
R13 680 (0.1W)
Q03
Q04
R16 680 (0.1W)
R17 10k (0.1W)
R15 10 (1/4W)
D07
C10 100
Q05 : PHOTO AMP POWER SW
Q05
R19 2.2k (0.1W)
PHD01
R01 82k (0.1W)
D01
R02 4.7k (0.1W)
R03 33k (0.1W)
C01 220p
R04 560k (0.1W)
R05 10k (0.1W)
R06 82k (0.1W)
R07 100k (0.1W)
R08 33k (0.1W)
C02 33p
Q01
Q02
R09 6.8k (0.1W)
C03 0.001
R10 36k (0.1W)
C04 0.001
IC03
R11 100k (0.1W)
IC05
D02
C07 4.7
R12 1M
X01
C05 20p
C06 20p
Q03, Q04 : INFRARED RAY LED DRIVER
Q01, Q02 : PHOTO AMP
IC03 : SIGNAL DETECTOR
IC05 : VOLTAGE DETECTOR

IC01	PD5108
IC02	AZC1045
IC03	AZC1046
IC04	AZC1047
IC05	AZC1048
Q01, Q02	AZC1050
Q03, Q04	AZC1051
Q05	AZC1052
D03-D06	AZC1049
D01, D02, D7-D15	AZC1233
PHD01	AZC1055
IED01, IED02	AZC1053
LED01, LED02	AZC1054

6.4 P.C.BOARD PATTERNS

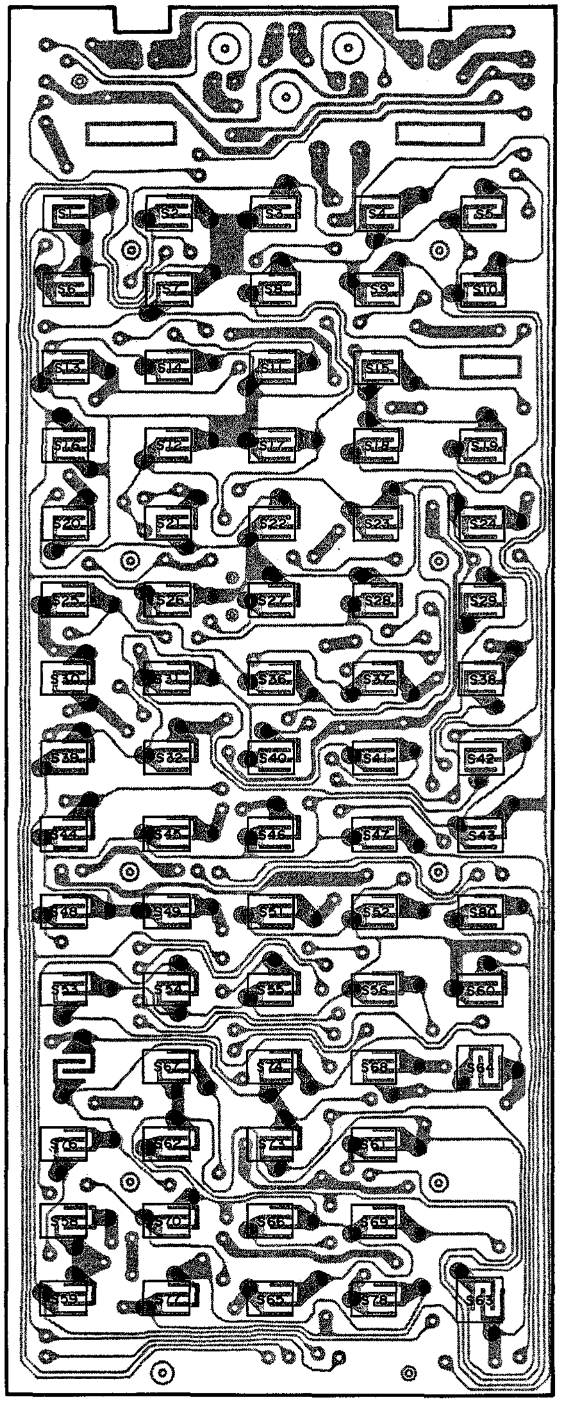
NOTE :

-▭- : Indicates a chip resistor.

-▮- : Indicates a chip capacitor.

⊠ : Indicates a chip transistor.

-▶|- : Indicates a chip diode.


S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S13
S14
S11
S15
S16
S12
S17
S18
S19
S20
S21
S22
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S41
S42
S44
S45
S46
S47
S43
S48
S49
S51
S52
S80
S53
S54
S55
S56
S60
S57
S74
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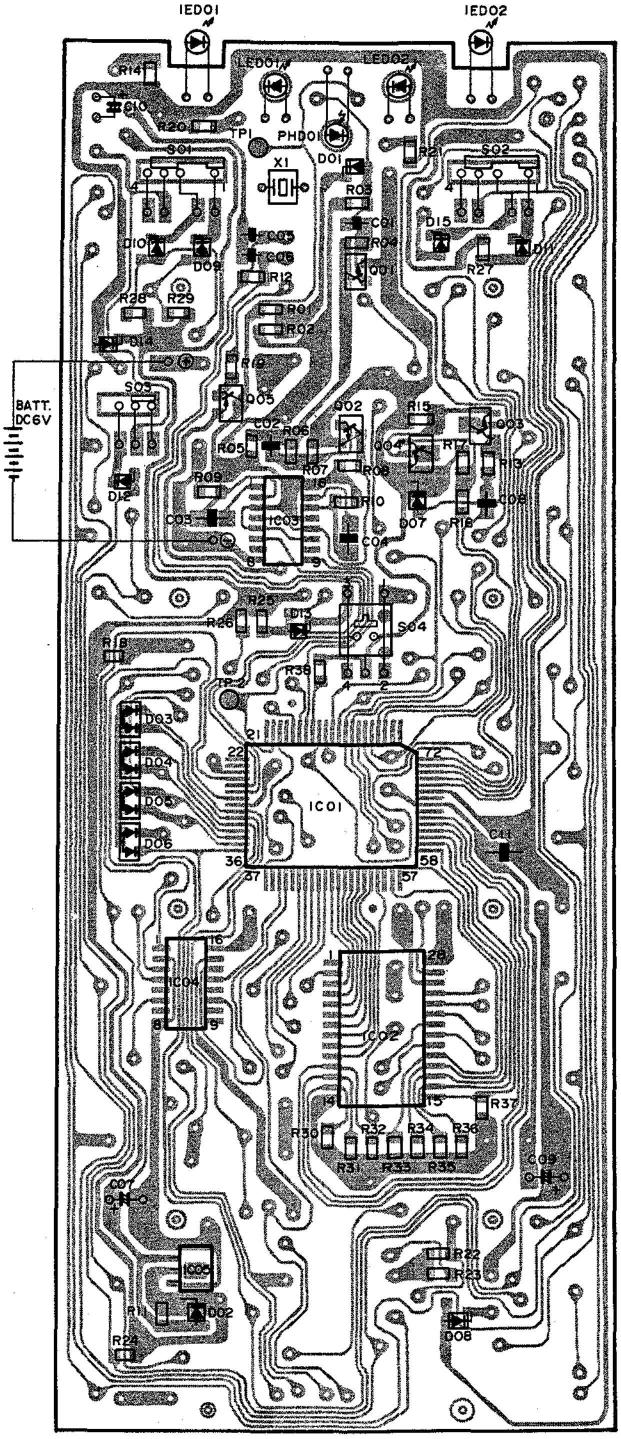
S69
S59
S71
S65
S78
S63


IED01
IED02
R14
C10
LED01
LED02
R20
TP1
PHD01
D01
R21
S01
S02
X1
R03
C01
R04
Q01
D10
D09
C03
C05
R12
D15
R27
D11
R28
R29
R01
R02
D14
R19
BATT.
DC6V
S03
D05
Q02
R15
Q03
R05
C02
R06
Q04
R17
R13
R07
R08
R09
D12
16
R10
D07
R16
C06
C03
IC03
C04
8
9
R25
R26
D13
S04
R18
R38
TP2
D03
21
22
72
D04
IC01
D05
C11
D06
36
37
58
57
16
IC04
8
9
28
IC02
14
15
R37
R30
R32
R34
R36
R31
R33
R35
C09
C07
R22
R23
IC05
R11
D02
D08
R24

7. FOR VSX-9500S/SD/G, VSX-7500S/KUC AND SD/G TYPES

CONTRAST OF MISCELLANEOUS PARTS

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

The VSX-9500S/SD/G, VSX-7500S/KUC and SD/G types are the same as the VSX-9500S/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		VSX-9500S/ KUC type	VSX-9500S/ SD/G type	VSX-7500S/ KUC type	VSX-7500S/ SD/G type	
	AF assembly	AWZ2507	AWZ2507	AWZ2518	AWZ2518	
	MOTOR VOL assembly	AWZ2509	AWZ2509	AWZ2519	AWZ2519	
	VIDEO/SUR/CONTROL assembly	AWZ2511	AWZ2511	AWZ2520	AWZ2520	
	FRONT CONTROL A assembly	AWZ2513	AWZ2513	AWZ2521	AWZ2521	
	FRONT CONTROL B assembly	AWZ2514	AWZ2514	AWZ2522	AWZ2522	
	METER AMP assembly	AWZ2515	AWZ2515	AWZ2523	AWZ2523	
	REAR AMP assembly	AWZ2516	AWZ2516	AWZ2524	AWZ2524	
	S TERM./CENTER SP assembly	AWK1219	AWK1219	....	....	
	S TERM./MULTI ROOM assembly	....	....	AWK1222	AWZ1222	
	PRO LOGIC assembly	AWX1025	AWX1025	....	....	
⚠	T1 Power transformer (AC120V)	ATS1205	....	ATS1144	....	
⚠	T1 Power transformer (AC110V, 120V−127V, 220V, 240V)	....	ATS1206	....	ATS1145	
⚠	S3 Line voltage selector switch (AC110V,120V−127V,220V,240V)	....	AKX−507	....	AKX−507	
⚠	S2 Line voltage selector switch (AC110V−127V,220V−240V)	....	AKX1004	....	AKX1004	
	S4 Slide switch (75μS−50μS)	....	ASH−004	....	ASH−004	
⚠	FU1 Fuse (10A/125V)	AEK−310	....	AEK−310	....	
⚠	FU1,FU2 Fuse (6A/125V)	....	AEK−109	....	AEK−109	
⚠	Q9 Transistor	2SC3180N	2SC3180N	....	....	
⚠	Q10 Transistor	2SA1263N	2SA1263N	....	....	
⚠	Fuse holder	....	AKR−032	....	AKR−032	
⚠	AC Power cord	ADG1031	ADG1015	ADG1031	ADG1015	
⚠	Hinge knob	AAD1396	AAD1396	AAD1397	AAD1397	
	Mica sheet	AEC−818	AEC−818	....	....	For Q9,Q10
	Mica sheet	AEE1033	AEE1033	....	....	For Q1∼Q4
	Mica sheet	....	....	AEC1123	AEC1123	For Q1∼Q4
	Front panel	ANB1302	ANB1302	ANB1303	ANB1303	

Mark	Symbol & Description	Part No.				Remarks
		VSX-9500S/ KUC type	VSX-9500S/ SD/G type	VSX-7500S/ KUC type	VSX-7500S/ SD/G type	
	Insulator assembly	AMR1434	AMR1434	AMR1350	AMR1350	
	Insulator assembly	AMR1435	AMR1435	AMR1353	AMR1353	
	Bush	ABF1018	ABF1018	....	....	For Q1~Q4
	Screw	....	VMZ26P040FZK	....	VMZ26P040FZK	For assembling S4
	Screw	ABA1009	ABA1009	ABA1063	ABA1063	For assembling REAR AMP assembly
	Washer	ABE−053	ABE−053	ABE−061	ABE−061	
	Packing case	AHD1620	AHD1621	AHD1622	AHD1623	
	Spacer	....	AHB1006	....	AHB1006	For packing

AF assembly (AWZ2518)

The AF assembly (AWZ2518) is the same as the AF assembly (AWZ2507) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2507	AWZ2518	
	C189	....	CEAS100M25	
	C207,C208	CMA270J500	CCCSL270K500	
	C505,C506 (6800μF/DC42)	ACH1110	....	
	C505,C506 (5600μF/DC42)	....	ACH1047	
	R191,R192	....	RD1/8PM153J	
	R193,R194,R196	....	RD1/8PM102J	
	R195	....	RD1/8PM273J	

MOTOR VOL assembly (AWZ2519)

The MOTOR VOL assembly (AWZ2519) is the same as the MOTOR VOL assembly (AWZ2509) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2509	AWZ2519	
	VR671 Variable resistor with motor	ACX1016 (100k×2, 50k×3)	ACX1015 (100k×2, 50k×3)	

FRONT CONTROL B assembly (AWZ2522)

The FRONT CONTROL B assembly (AWZ2522) is the same as the FRONT CONTROL B assembly (AWZ2514) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2514	AWZ2522	
	S866,S867	ASG1029	....	

VIDEO/SUR/CONTROL assembly (AWZ2520)

The VIDEO/SUR/CONTROL assembly (AWZ2520) is the same as the VIDEO/SUR/CONTROL assembly (AWZ2511) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2511	AWZ2520	
	C444,C445	CEAS2R2M50	···············	
	R458	RD1/8PM392J	···············	
	R460	RD1/8PM102J	···············	
	R515	RD1/8PM223J	···············	
	CN11	KPE12	KPE15	
	CN12	KPE8	···············	
	CN19	KPE3	···············	
	CN20	KPC5	···············	
	1P Pin jack	AKB1010	···············	
	6P Pin jack	AKB1093	···············	
	3P Pin jack	···············	AKB1092	
	4P Pin jack	···············	AKB1007	

FRONT CONTROL A assembly (AWZ2521)

The FRONT CONTROL A assembly (AWZ2521) is the same as the FRONT CONTROL A assembly (AWZ2513) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2513	AWZ2521	
	Q812	RN2203	···············	
	D814−D817	1SS252	···············	
	S854,S855	ASG−711	···············	
	R822	RD1/8PM104J	···············	
	R834	···············	RA5S103J	

METER AMP assembly (AWZ2523)

The METER AMP assembly (AWZ2523) is the same as the METER AMP assembly (AWZ2515) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2515	AWZ2523	
	C636	···············	CEAS010M50	
	R635	RD1/8PM334J	···············	
	R661,R662	···············	RD1/8PM105J	
	R669	···············	RD1/8PM274J	

REAR AMP assembly (AWZ2524)

The REAR AMP assembly (AWZ2524) is the same as the REAR AMP assembly (AWZ2516) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2516	AWZ2524	
	IC603	UPC1270H	....	
	Q603	2SC2458	....	
	C619	CEAS2R2M50	....	
	C620	CKMYB102K50	....	
	C621	CEHAQ101M10	....	
	C622	CCMSL270J50	....	
	C623	CEAS100M50	....	
	C624	CFTXA333J50	....	
	C625	CKDYF103Z50	....	
	R621,R623	RD1/8PM222J	....	
	R622	RD1/8PM563J	....	
	R624	RD1/8PM473J	....	
	R625	RD1/8PM684J	....	
	R626	RD1/8PM122J	....	
	R627	RD1/8PM102J	....	
	R628	RD1/8PM123J	....	
	R629 (0.22×2)	ACN−131	....	

S TERM./MULTI ROOM assembly (AWK1222)

The S TERM./MULTI ROOM assembly (AWK1222) is the same the S TERM./CENTER SP assembly (AWK1219) with the exception of the following sections.

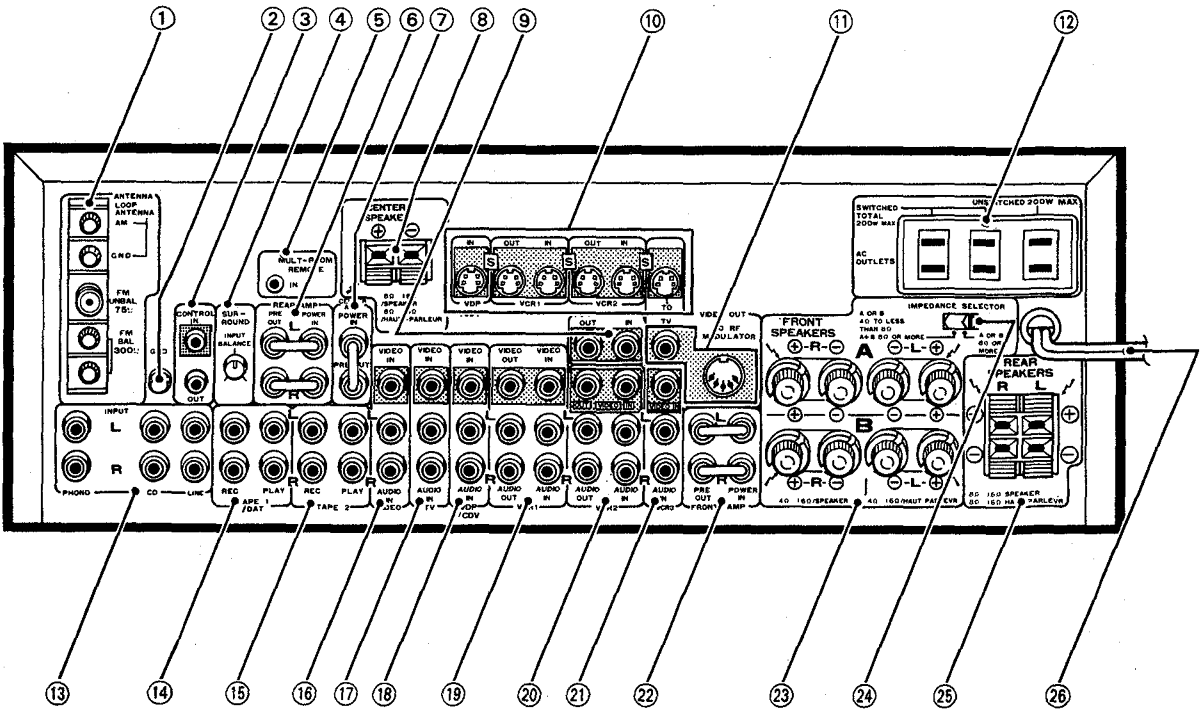
Mark	Symbol & Description	Part No.		Remarks
		AWK1219	AWK1222	
	Q926	RN1201	....	
	D905,D906	1SS252	....	
	RY901	ASR1005	....	
	L901 (0.7μH)	ATH1011	....	
	C926	CFTXA104J50	....	
	R958,R959	RD1/4PMF4R7J	....	
	R960	RD1/8PM183J	....	
	CN51, CN52	KPC3	....	
	2P Speaker terminal (Center SP)	AKE−058	....	

8. PANEL FACILITIES

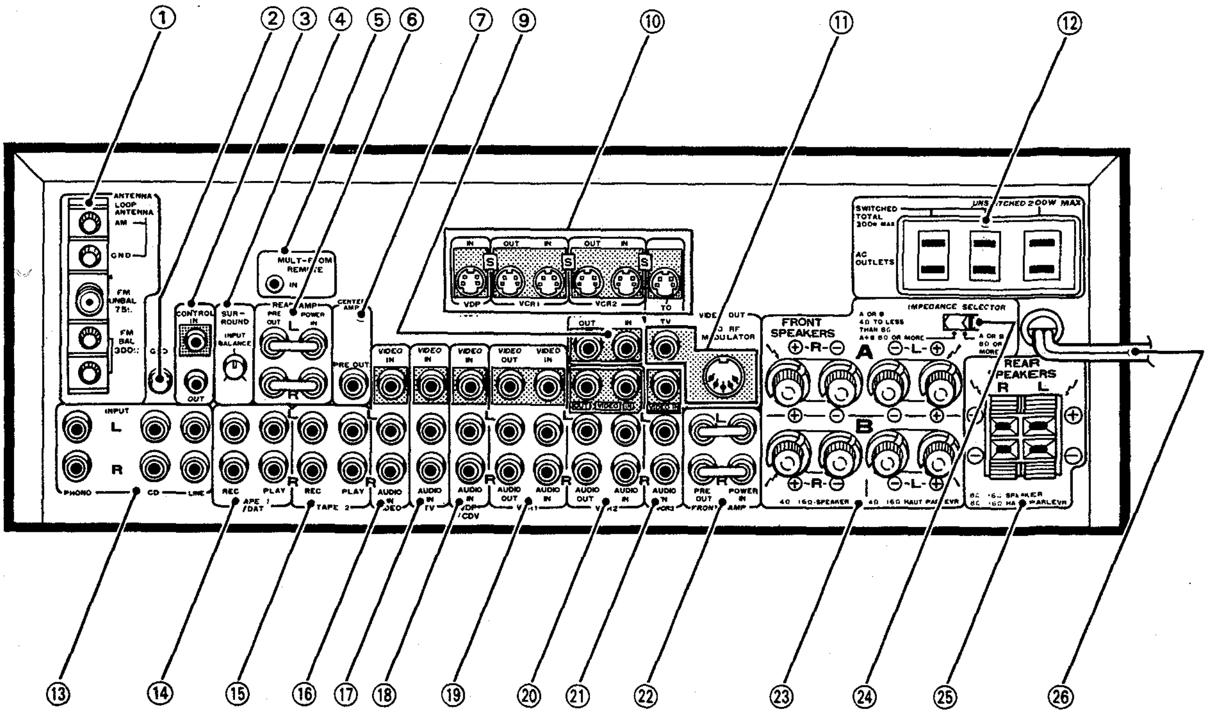
REAR PANEL

VSX-9500S

* Illustrations show U.S. models.


① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
ANTENNA
LOOP ANTENNA
AM
GND
FM UNBAL 75Ω
FM BAL 300Ω
CONTROL
IN
OUT
SUR-ROUND
INPUT BALANCE
MULTI-ROOM REMOTE
IN
REAR AMP
PRE OUT
POWER IN
CENTER SPEAKER
POWER IN
PRE OUT
VDP
VCR1
VCR2
TV
VIDEO OUT TO RF MODULATOR
FRONT SPEAKERS
A
B
IMPEDANCE SELECTOR
SWITCHED TOTAL 200W MAX
UNSWITCHED 200W MAX
AC OUTLETS
REAR SPEAKERS
R
L
INPUT
PHONO
CD
LINE
REC
PLAY
TAPE 1 /DAT
TAPE 2
VIDEO IN
AUDIO IN
TV
VDP /CDV
VIDEO OUT
AUDIO OUT
PRE OUT
POWER IN
FRONT AMP
⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖

VSX-7500S


① ② ③ ④ ⑤ ⑥ ⑦ ⑨ ⑩ ⑪ ⑫
ANTENNA
LOOP ANTENNA
AM
GND
FM UNBAL 75Ω
FM BAL 300Ω
CONTROL
IN
OUT
SUR-ROUND
INPUT BALANCE
MULTI-ROOM REMOTE
IN
REAR AMP
PRE OUT
POWER IN
CENTER AMP
PRE OUT
VDP
VCR1
VCR2
TV
VIDEO OUT TO RF MODULATOR
FRONT SPEAKERS
A
B
IMPEDANCE SELECTOR
SWITCHED TOTAL 200W MAX
UNSWITCHED 200W MAX
AC OUTLETS
REAR SPEAKERS
R
L
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CD
LINE
REC
PLAY
TAPE 1 /DAT
TAPE 2
VIDEO IN
AUDIO IN
TV
VDP /CDV
VIDEO OUT
AUDIO OUT
PRE OUT
POWER IN
FRONT AMP
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① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.
Attach the accessory AM Loop and FM T-type antennas, here.

- For details regarding antenna connection, see the section "Hints for Better Reception" on page 45.

② GND terminal

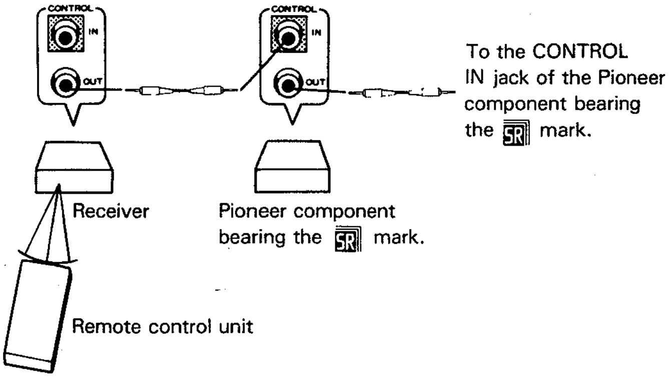
Connect the turntable ground lead to this terminal.

③ CONTROL IN, OUT jacks

Used for system control with other Pioneer components bearing the SR mark.

IN....... For connection from the CONTROL OUT jack of another component.
OUT.... For connection to the CONTROL IN jack of another component.

NOTE:
The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


CONTROL
IN
OUT
CONTROL
IN
OUT
To the CONTROL IN jack of the Pioneer component bearing the SR mark.
Receiver
Pioneer component bearing the SR mark.
Remote control unit

④ SURROUND INPUT BALANCE control (DOLBY SURROUND)

[VSX-7500S]
This knob is for adjusting the balance of the DOLBY SURROUND input signal. To adjust, apply a monaural sound signal and rotate until the SURROUND (rear) sound becomes minimal. (See page 31.)

[VSX-9500S]
Set the front panel PRO LOGIC CENTER MODE switch to the OFF position. Play back a monaural source. Then adjust balance so that you hear minimum volume from all channels. (See page 31.)

⑤ MULTI-ROOM REMOTE IN jack.

When using the optional MR-100 adaptor for multi-room remote control, connect to this jack.

⑥ REAR AMP jacks

[PRE OUT]
When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

[POWER IN]
When a separate pre-amplifier is used for rear speakers and this unit is used as a power amplifier, connect the pre-amplifier to these jacks.

⑦ CENTER AMP jacks

[POWER IN] (VSX-9500S only)
When a separate pre-amplifier is used for center speaker and this unit is used as a power amplifier, connect the pre-amplifier to this jack.

[PRE-OUT]
When a separate power amplifier is used to drive the center speaker, connect the power amplifier to this jack.

⑧ CENTER SPEAKER terminal (VSX-9500S only)

Connect the center speaker here.

NOTE:
Use a center speaker with an impedance from 8 ohms to 16 ohms.

⑨ VIDEO ADAPTOR jacks

Use to connect a video adaptor component such as a video enhancer or color corrector.

⑩ S (connector) video jacks

When used in conjunction with a VCR, VDP or monitor TV equipped with S video jacks, connect to these jacks.

⑪ VIDEO OUT jacks

Use to connect a TV set for watching program materials from a VCR or VDP connected to this unit.

[TO MONITOR TV jack]
Connect to a monitor TV or a TV set with video input terminals.

- If monitor with S-VHS input connector is used, you also need line out to video monitor.

[TO RF MODULATOR jack]
Use to connect a conventional TV set. When performing connections, the RF MODULATOR JA-RF5 (sold separately) is required. By connecting an RF modulator, video signal can be converted to VHF signal (U.S. channel 3 or 4), thus allowing this unit to be used to view the selected source on a conventional television set.

NOTE

- *A "conventional TV set" has an antenna input terminals only.*
- *Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdown may occur when conductors come into contact with each other.*
- *Don't connect the TO MONITOR TV VIDEO OUT (RCA pin jack and S jack) and the TO RF MODULATOR jack to the same set at the same time.*

⑫ AC OUTLETS

[U.S. and Canadian models]

SWITCHED TOTAL 200 W MAX (VSX-9500S)
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 200 W.

SWITCHED TOTAL 300 W MAX (VSX-7500S)
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 300 W.

UNSWITCHED 200 W MAX
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 200 W.

[Multi-voltage model]

SWITCHED TOTAL 100 W MAX
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

UNSWITCHED 100 W MAX
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

NOTE:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*
  This can cause the receiver to malfunction.

⑬ Audio INPUT jacks

PHONO............... Connect to turntable.
CD...................... Connect to compact disc player.
LINE................... Connect to the audio output jacks of an additional audio component.

⑭ TAPE 1/DAT jacks

Connect a DAT (digital audio tape deck) or your primary analog cassette deck to these jacks.

Connection for Recording

The tape recording jack (TAPE REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

Connection for Playback

Connect the TAPE PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

⑮ TAPE 2 jacks

Connect a second cassette deck to these jacks.

Connection for Recording

The tape recording jack (TAPE REC) on the cassette deck should be connected to the REC side of the TAPE 2 jack on the receiver with a pin plug connecting cord.

Connection for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 jack on the receiver with a pin plug connecting cord.

⑯ VIDEO jacks (input)

Connect the output jacks of video components.
For example, connect a playback-only VCR or a video camera.

⑰ TV jacks (input)

Use these jacks if wish to connect a TV tuner having both video and audio outputs.

[VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑱ VDP/CDV jacks

[VIDEO IN]

When watching the video image from a LD player (VDP/CDV player) (or a VCR used for playback), connect its VIDEO OUTPUT jack here.

[AUDIO IN (L,R)]

When playing back the audio channel from a LD player (VDP/CDV player) or a VCR for playback, connect its AUDIO OUTPUT jacks here.

⑲ VCR 1 jacks

[VIDEO IN]

To receive the video image from VCR 1 used for playing, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L, R)]

To receive the audio channels from VCR 1 used for playing, connect its AUDIO OUTPUT jacks here.

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2, VCR 3, VIDEO, VDP/CDV or TV jacks, connect to the VIDEO INPUT jack of the VCR 1 used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2, VCR 3, VIDEO, VDP/CDV or TV jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR 1 used for recording.

⑳ VCR 2 jacks

[VIDEO IN]

To receive the video image from VCR 2 used for playing, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L, R)]

To receive the audio channels from VCR 2 used for playing, connect its AUDIO OUTPUT jacks here.

[VIDEO OUT]

When copying program materials from the video component connected to the VCR 1, VCR 3, VIDEO, VDP/CDV or TV jack, connect to the VIDEO INPUT jack of the VCR 2 used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1, VCR 3, VIDEO, VDP/CDV or TV jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR 2 used for recording.

㉑ VCR 3 input jacks

[VIDEO IN]

To receive the video image from a VCR used for playing only, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

To receive the audio channels from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

㉒ FRONT AMP jacks

[PRE-OUT]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[POWER IN]

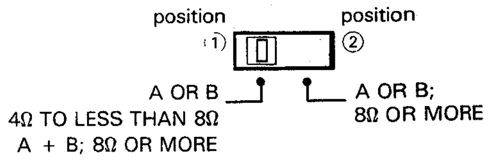
When a separate pre-amplifier is connected and this unit is used as power amplifier, connect the pre-amplifier to these jacks.

㉓ FRONT SPEAKERS terminals

A: Connect to a first set of speakers.
B: Connect to a second set of speakers.
Please refer to item ㉔ Front speakers impedance selector switch.

㉔ Front speakers impedance selector switch

Set this switch to match the impedance of your speakers.



I When using one pair of speakers:

Impedance of a speaker	Selector position
4Ω to less than 8Ω	①
8Ω or more	②

II When using two pairs of speakers:

Select ① as the selector switch position and use speakers having impedance of 8Ω or more.

NOTE:
Turn off the receiver's power before changing the impedance selector switch setting.

㉕ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

Speaker impedance

Connect speaker systems with a nominal impedance of between 8 and 16Ω.

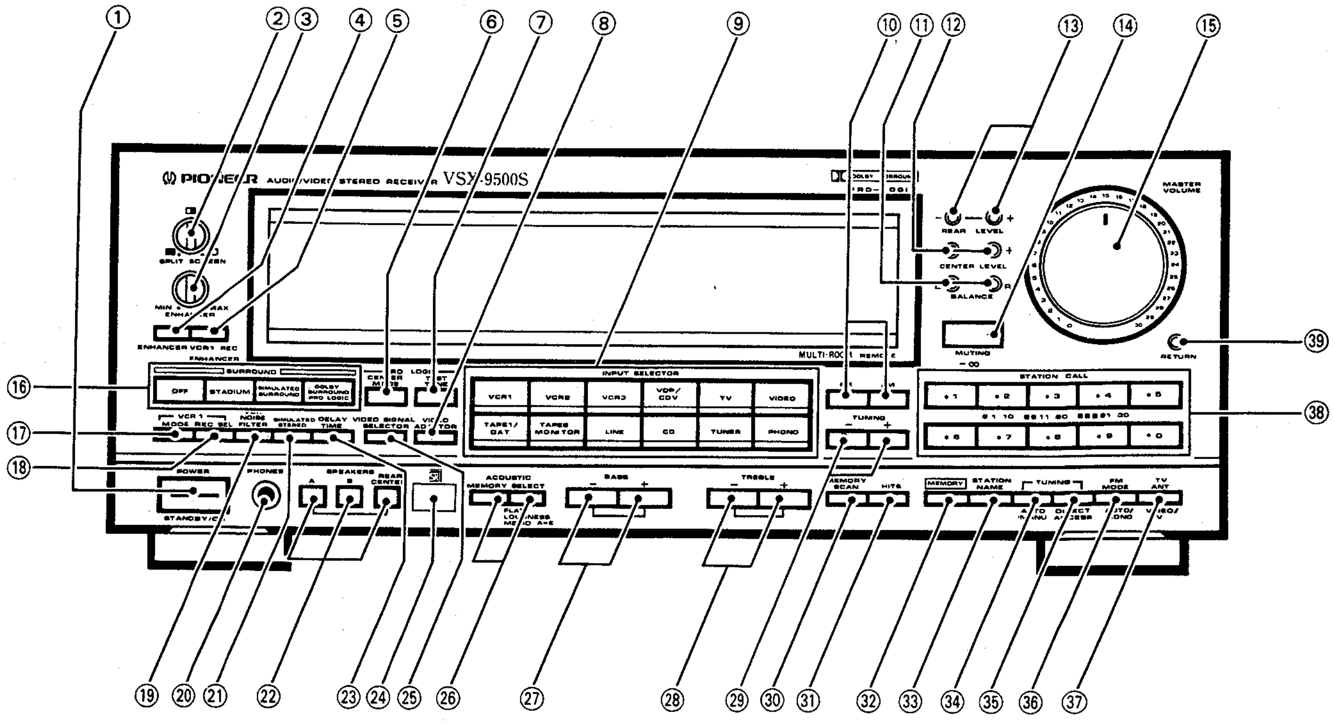
NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

㉖ AC Power cord

Connect to AC wall socket.

FRONT PANEL

VSX-9500S ⑥, ⑦, ⑫ ... VSX-9500S only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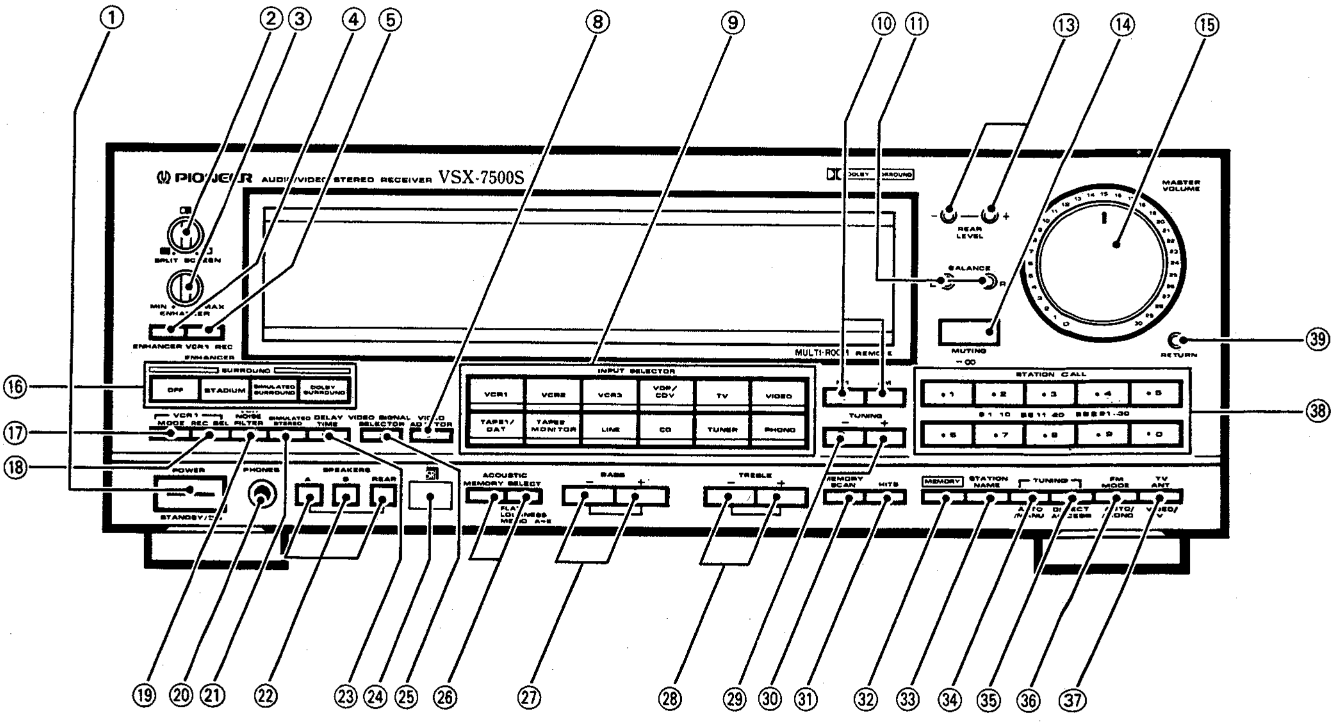
PIONEER
AUDIO/VIDEO STEREO RECEIVER VSX-9500S
SPLIT SCREEN
ENHANCER
MIN
MAX
ENHANCER VCR1 REC
SURROUND
OFF
STADIUM
SIMULATED SURROUND
DOLBY SURROUND PRO LOGIC
VCR 1
MODE
REC SEL
NOISE FILTER
SIMULATED STEREO
DELAY TIME
VIDEO SIGNAL SELECTOR
VIDEO ADAPTOR
INPUT SELECTOR
VCR1
VCR2
VCR3
VDP/CDV
TV
VIDEO
TAPE1/DAT
TAPE2 MONITOR
LINE
CD
TUNER
PHONO
POWER
STANDBY/ON
PHONES
SPEAKERS
A
B
REAR CENTER
ACOUSTIC MEMORY SELECT
FLAT
LOUDNESS
MEMO A+E
BASS
TREBLE
TUNING
MEMORY SCAN
HITS
MEMORY
STATION NAME
AUTO MANU
DIRECT ACCESS
FM MODE
AUTO/MONO
TV ANT
VIDEO/TV
STATION CALL
MULTI-ROOM REMOTE
REAR LEVEL
CENTER LEVEL
BALANCE
L
R
MUTING
-∞
MASTER VOLUME
RETURN

VSX-7500S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PIONEER
AUDIO/VIDEO STEREO RECEIVER VSX-7500S
DOLBY SURROUND
SPLIT SCREEN
ENHANCER
MIN
MAX
ENHANCER VCR1 REC
SURROUND
OFF
STADIUM
SIMULATED SURROUND
DOLBY SURROUND
VCR 1
MODE
REC SEL
NOISE FILTER
SIMULATED STEREO
DELAY TIME
VIDEO SIGNAL SELECTOR
VIDEO ADAPTOR
INPUT SELECTOR
VCR1
VCR2
VCR3
VDP/CDV
TV
VIDEO
TAPE1/DAT
TAPE2 MONITOR
LINE
CD
TUNER
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POWER
STANDBY/ON
PHONES
SPEAKERS
A
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REAR
ACOUSTIC MEMORY SELECT
FLAT
LOUDNESS
MEMO A+E
BASS
TREBLE
TUNING
MEMORY SCAN
HITS
MEMORY
STATION NAME
AUTO MANU
DIRECT ACCESS
FM MODE
AUTO/MONO
TV ANT
VIDEO/TV
STATION CALL
MULTI-ROOM REMOTE
REAR LEVEL
BALANCE
L
R
MUTING
-∞
MASTER VOLUME
RETURN

① POWER STANDBY/ON switch

ON: The power to the unit is turned on.

STANDBY: This is equivalent to OFF but in fact a fraction of power still feeds the unit.

- The accessory remote control unit can also be used to turn the receiver on or standby (STANDBY function).

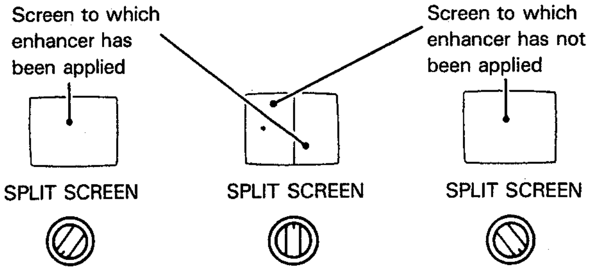
NOTE:

- *When not using the unit for a long period, disconnect the power cord from the AC OUTLETS in the wall.*
- *When the power is initially turned ON, muting is applied to prevent sound from being output for about 5 seconds.*

② SPLIT SCREEN control

This split screen function can be used when the ENHANCER switch is on.

This control allows you to freely control the area of enhanced picture (on right side of screen) and original picture (non-enhanced, on left side of screen) by means of a vertical line dividing the screen into two sections. It has no effect on an S output jack signal.


Screen to which enhancer has been applied
Screen to which enhancer has not been applied
SPLIT SCREEN
SPLIT SCREEN
SPLIT SCREEN

Knob positions

NOTE:

This line is not output from the VCR (VCR 1 and VCR 2) VIDEO OUT jacks. As a result, the split screen image is not recorded; the recorded image will be entirely that produced by the enhancer function.

③ ENHANCER control

When performing tape copying with a VCR, some deterioration in image quality occurs normally. This control allows compensation for this deterioration in image quality by emphasizing image detail. This has no effect on an S output jack signal.

NOTE:

The ENHANCER control functions to suppress image deterioration, but will not improve image quality beyond its original state.

④ ENHANCER switch

Press when performing video copying with added video enhancer effects. When the switch is pressed, the monitored video image will be the split screen picture.

Using the SPLIT SCREEN function will enable you to compare the enhanced and original (non enhanced) images. It has no effect on an S output jack signal.

The ENHANCER switch will not operate if the VCR 1 REC ENHANCER is on (ENHANCER REC indication is lit) while the VCR 1 REC SEL switch is on.

Turn off the VCR 1 REC SEL switch if you want to enhance the signal sent to the MONITOR TV and RF MODULATOR jacks.

⑤ VCR 1 REC ENHANCER switch

Turn this switch ON to record on the VCR connected to the VCR 1 jacks the video image from VCR 2 or VDP with enhancement applied using the ENHANCER control knob. At this time, the enhancer is turned off for the monitor and VCR 2 REC OUT. This has no effect on an S output jack signal.

NOTE:

- *The VCR 1 REC SEL switch must be on for the VCR 1 REC ENHANCER switch to operate.*

⑥ PRO LOGIC CENTER MODE switch (VSX-9500S)

This operates if DOLBY PRO LOGIC SURROUND is ON. Switches between the four DOLBY PRO LOGIC SURROUND center channel settings. The setting changes in the order listed below each time you press the switch.

NORMAL ——	Use this setting when a small enclosure center channel speaker incapable of reproducing frequencies below 100Hz is connected.
WIDE ——	Use this setting when a large enclosure center channel speaker capable of reproducing frequencies below 100Hz is connected.
PHANTOM ——	Use this setting when no center channel speaker is connected.
OFF ——	Select this setting for adjusting input balance. Use a mono [AM radio, etc.] signal and adjust the surround balance control on rear panel so that volume is minimized from all speakers.

NOTES:

- *If no center speaker is used, then mono signals and center channel signal components will not be reproduced at positions other than the PHANTOM position.*
- *To provide for correct surround operation, you must have a stereo source or no output will be heard.*

⑦ PRO LOGIC TEST TONE switch (VSX-9500S)

Only operates when the DOLBY PRO LOGIC SURROUND surround mode is selected. When the switch is turned ON, "TEST" appears on the central display and a test tone approximately two seconds in duration is generated in all channels in succession. Adjust the speaker level controls so that all speakers sound equally loud from the listening position for the optimum surround effect.

NOTE (For VSX-7500S only):

Adjust the center speaker volume level of the amplifier driving the center speaker, if one (such amplifier) is used.

⑧ VIDEO ADAPTOR switch

Press when using a video adaptor component connected to the rear panel VIDEO ADAPTOR terminals. An indicator on the display section lights up when this switch is set to ON. This has no effect on an S output jack signal.

⑨ Audio/Video INPUT SELECTOR switches

VCR 1: Press when performing playback on a VCR unit.

VCR 2: Press when performing playback on a second VCR unit.

VCR 3: Press when performing playback on a third VCR unit.

VDP/CDV: Press when performing playback on a video disc player (VDP) or CDV player.

TV: Press to watch TV broadcasts from the TV tuner connected to the rear panel TV jacks.

VIDEO: Press when performing playback on a VCR connected to VIDEO jack.

TAPE 1/DAT: Press when performing playback on a DAT or cassette deck.

TAPE 2 MONITOR: Press when performing playback on a second cassette deck and when monitoring recording or using a graphic equalizer.

LINE: Press when performing playback on an audio component connected to the LINE jacks.

CD: Press when playing compact discs on a CD player.

TUNER: Press when listening to radio broadcasts.

PHONO: Press when playing records on a turntable.

⑩ BAND selector switches

FM: Press for FM reception.

AM: Press for AM reception.

⑪ BALANCE switches

Use to adjust the sound volume balance between left and right speakers.

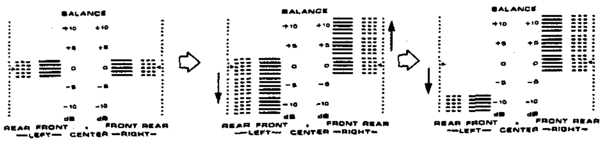
L: Press to decrease the sound on the right side.

R: Press to decrease the sound on the left side.

Press L and R together to bring the volume balance back to standard (left = Right).

NOTE:
The left-right sound volume balance cannot be adjusted independently on the front and rear speakers.

Example: If press and keep the "R" switch



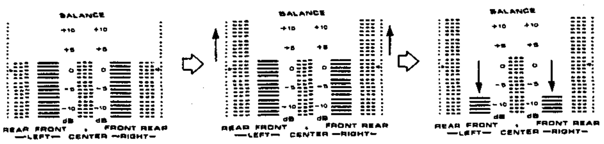
⑫ CENTER LEVEL (+, -) switches (VSX-9500S)

Use these switches to adjust the center speaker sound level to the level of the front speakers.
Operate only when DOLBY PRO LOGIC SURROUND mode is on.
After adjustment, use the MASTER VOLUME control to adjust the overall sound to a suitable level.
– : Lowers the center speaker sound level.
+ : Raises the center speaker sound level.
The level is displayed on the display section BALANCE/LEVEL meters.
Pressing – and + at the same time returns you to the standard.

⑬ REAR LEVEL (–, +) switches

Operate only when the surround mode is on.
These switches are used to preset the sound level difference between the front and rear speakers. In this way, after presetting the difference, the overall volume of the front and rear speakers can be changed using the MASTER VOLUME control, while still maintaining the sound volume differential.
– : Surround rear speaker volume is reduced.
+ : Surround rear speaker volume is increased.
Pressing + and – together will restore front and rear to the standard balance setting.

Example: If press and keep the "+" switch



Operate only when SURROUND mode is on.

⑭ MUTING switch

Press to temporarily cut off the sound volume. The display section MUTING indicator will flash. When pressed again, the sound will return to its previous level.

⑮ MASTER VOLUME control

Use to simultaneously adjust the sound volume from the front and surround speakers.

⑯ SURROUND Mode Selector Switches

OFF:
To cancel the surround function.
STADIUM:
Ideal for sports broadcasts, etc.
SIMULATED SURROUND:
Gives concert-hall presence to monaural sound (AM, TV, etc.).
DOLBY PRO LOGIC SURROUND (VSX-9500S)
DOLBY SURROUND (VSX-7500S)
Select this setting when watching video tapes or video discs bearing the DD DOLBY SURROUND mark.

⑰ VCR 1 MODE switch

Toggles the VCR 1 signal between mono and stereo. It operates both during playback and during recording.

⑱ VCR 1 REC SEL(ECTOR) switch

Use this switch to select the VCR 1 copy mode independent of the INPUT SELECTOR switch setting. Each time you press it the unit switches between the following three settings. The current setting is shown on the central display section.

VCR 2 → VCR 1 → VDP/CDV → VCR 1 → OFF

NOTE:
At the OFF position, the video source selected by the INPUT SELECTOR is output at the REC jack.

⑲ VCR NOISE FILTER switch

If tape hiss is noticeable in the sound while performing playback of video cassette tapes, press this switch to reduce the noise.
After pressing this switch, "VCR NOISE FILTER" will appear on the display section.
This switch can be used when either VCR 1 or VCR 2 INPUT SELECTOR switch is selected. The VCR NOISE FILTER has no effect on VCR 3 playback.

NOTE:
- *The effectiveness in reducing high-frequency hiss noise varies depending on the type of tape used, the recording level, and other conditions.*

⑳ PHONES jack

Connect the plug on your headphones to this jack. To only hear through the headphones, set all SPEAKERS A, B and REAR switches to the OFF position.

㉑ SIMULATED STEREO switch

Press to produce a simulated stereo effect when listening to monaural sources (for example AM or TV broadcasts).
"SIMULATED STEREO" appears on the display section.

NOTE:
There is no sound output from the rear speakers during this operation.

㉒ SPEAKER switches

VSX-9500S: switches A, B, REAR/CENTER.
VSX-7500S: switches A, B, and REAR.
ON/OFF switches for the speaker systems. An indicator on the display section lights when any of these switches is set to ON.

NOTE:
Rear speaker on/off switching is possible only when the surround mode is on.

NOTE FOR VSX-9500S:
Center speaker on/off switching is possible only when the DOLBY PRO LOGIC SURROUND (WIDE or NORMAL) mode is on.

㉓ DELAY TIME switch

Operates only when the surround mode is ON.
Switches the surround delay time in three steps. For DOLBY PRO LOGIC SURROUND (VSX-9500S) DOLBY SURROUND (VSX-7500S), 20 ms is standard.

15 ms → 20 ms → 30 ms

㉔ Remote signal sensor

㉕ VIDEO SIGNAL SELECTOR switch

When recording simulcast programs, the recorded image can be selected among VCR 1, VCR 2, VCR 3, VDP/CDV, TV and VIDEO.

VCR 1 → VCR 2 → VCR 3 → VDP/CDV → TV → VIDEO → OFF

The current setting is shown by an indicator on the display section.

Note that with an S video output jack, the switch is OFF for VCR 3, TV, and VIDEO.

VCR 1 → VCR 2 → OFF → VDP/CDV → OFF → OFF → OFF

NOTE:

- *When using a VCR for sound recording only, follow the operating instructions of the VCR.*
- *During VCR 1 REC SEL use, recording is not possible on VCR 1 using the VIDEO SIGNAL SELECTOR.*

㉖ ACOUSTIC Switch

MEMORY:

Pressing this switch will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT

This switch has three functions:

Each time you press the switch, the sound quality setting advances in the order shown below.

→ FLAT → LOUDNESS → A → B → C → D → E

I **FLAT:** For flat (normal) frequency response.

II **LOUDNESS:** Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound.

III **A–E:** Memorized acoustic memory settings.

- To preset the acoustic memories (A–E).
- To recall previously set sound quality settings.

Presetting the acoustic memory

❶ Adjust the sound quality as desired using the BASS and TREBLE control switches. LOUDNESS or FLAT only, can also be chosen.
  - ■ Settings are shown by the TONE indicator on the display section.

❷ Press the ACOUSTIC MEMORY switch.
  - ■ The TONE indicator on the display section blinks on and off.

❸ Press the ACOUSTIC SELECT switch and select the sign to which you wish to assign the setting (A – E).
  - ■ The sound quality setting is memorized approximately two seconds after you last press the ACOUSTIC SELECT switch.

In this way, the desired tone will be preset in one of the five acoustic memory positions. To preset four other desired tone settings, perform the same operations.

To recall the memorized tone settings, press the ACOUSTIC SELECT switch to select the desired memory position. In this way, five different tone settings can be preset and recalled in the five positions of the acoustic memory.

㉗ BASS control switches

Use to adjust the low-frequency level. Press the + switch to increase low-frequency level, and the – switch to decrease it.

The TONE indicator appears on the display section.

When both sides (+, –) of the BASS control are pressed simultaneously, the base response will be set to the flat (normal) condition.

㉘ TREBLE control switches

Use to adjust the high-frequency level. Press the + switch to increase high-frequency level, and the – switch to decrease it.

The TONE indicator appears on the display section.

When both sides (+, –) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

㉙ TUNING switches

[When tuning]

+ : Performs tuning in ascending frequency order.
– : Performs tuning in descending frequency order.

[When inputting station names]

+ : Displays the letters in alphabetical order.
– : Displays the alphabet in reverse order.

㉚ MEMORY SCAN switch

Operates when the INPUT SELECTOR is set to TUNER. Station frequencies assigned to the STATION CALL switches are tuned in, one after another, beginning with the current station no., for approximately 5 seconds each. The display section SCAN indicator will light. Press the switch again and the tuner remains tuned in to the station playing when the switch was pressed the second time.

Station frequencies not assigned station numbers in the memory are skipped.

㉛ HITS (Hyper Intelligent Tuning System) switch

- If the HITS switch is pressed at the currently displayed station frequency, the receiver searches up and down the frequency for the next station (The SEARCH indicator in the display section lights at this time.) and stops at the first one it finds.
- If the HITS switch is pressed during STATION NAME input, the receiver performs a memory search in order of ascending station number for memorized stations whose names begin with the same letter as the station just input.
- If the HITS switch is pressed during input of numbers for DIRECT ACCESS tuning, the receiver sets the remaining digits which have not yet been input to "0", searches for the corresponding frequencies, and stops on the first station it finds.

NOTE:

- *The system searches for stations within successive 1MHz ranges for FM and 100 kHz ranges for AM. During DIRECT ACCESS tuning, it searches up and down for a station until it reaches the edges of the band. If no receivable station is found within the band range, the receiver returns to the state it was in before the HITS switch was pressed.*
- *If the upper (or lower) frequency limit of the receiver is encountered during HITS operation, the receiver stops searching in that direction but continues to search in the other.*

㉜ MEMORY switch

When the unit is in the frequency display mode, pressing this switch will result in the memorization of the current broadcast band, reception frequency ACOUSTIC MEMORY position, and FM AUTO/MONO mode. This switch is also used to input station names

㉝ STATION NAME switch

This switch is used when inputting station names

㉞ AUTO/MANUAL TUNING selector switch

This switch is used to select the tuning mode. The AUTO tuning mode has been selected when the TUNING AUTO indicator lights.

AUTO tuning

When the – or + TUNING switch is pressed, the receiver automatically scans the broadcast station frequencies. When a broadcast is detected, the scanning stops at that frequency.

NOTE:

Pressing the TUNING switch (– or +) while scanning is taking place causes scanning to stop.

MANUAL tuning

This is the usual tuning method. Each time the – or + TUNING switch is pressed, the reception frequency is changed by one channel step. When pressed continuously, the receiver scans the broadcast frequencies continuously.

㉟ DIRECT ACCESS TUNING switch

When this switch is pressed, the STATION CALL switches function as ten-key number switches for direct input of the desired reception frequency.

If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low.

㊱ FM MODE AUTO/MONO selector switch

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This switch has no effect on reception of AM broadcasts.

㊲ TV ANT (VIDEO/TV) selector switch

This switch can be used in place of the TV ANT switch on the RF Modulator JA-RF5 (sold separately). This is effective only when the JA-RF5's TV ANT switch is set to the VIDEO position.
For example:

In VIDEO mode (TV-ANT indicator in the display section goes out):
Allows you to use video components connected to the receiver.

In TV mode (TV-ANT indicator in the display section lights):
Connects the TV antenna, thus allowing you to view normal TV broadcasts. The TV mode is selected while the receiver's power is off.

NOTE:

- *When in the VIDEO mode, no sound will be produced from the TV set's speakers. Listen using the speakers connected to the receiver.*
- *Noise may be produced if the TV set's volume control is turned up. Turn down the set's volume control when listening.*
- *This switch functions only when the TV ANT selector switch on the RF Modulator is set to "VIDEO."*
- *This switch is set to VIDEO when the power is turned on.*

㊳ STATION CALL RANDOM 30 CH switches

- These switches are used to preset and recall desired broadcasting stations, "AUTO STEREO"/"MONO" switch setting, and ACOUSTIC MEMORY mode.

Station call operation example:
If you press the [*2] key:

- One time — station 2 is selected.
- Two times — station 12 is selected.
- Three times — station 22 is selected.

NOTE:
Pressing the STATION CALL switches when a component other than TUNER is selected causes the INPUT SELECTOR setting to switch to TUNER.

- They are also used when performing direct access tuning.

㊴ RETURN switch

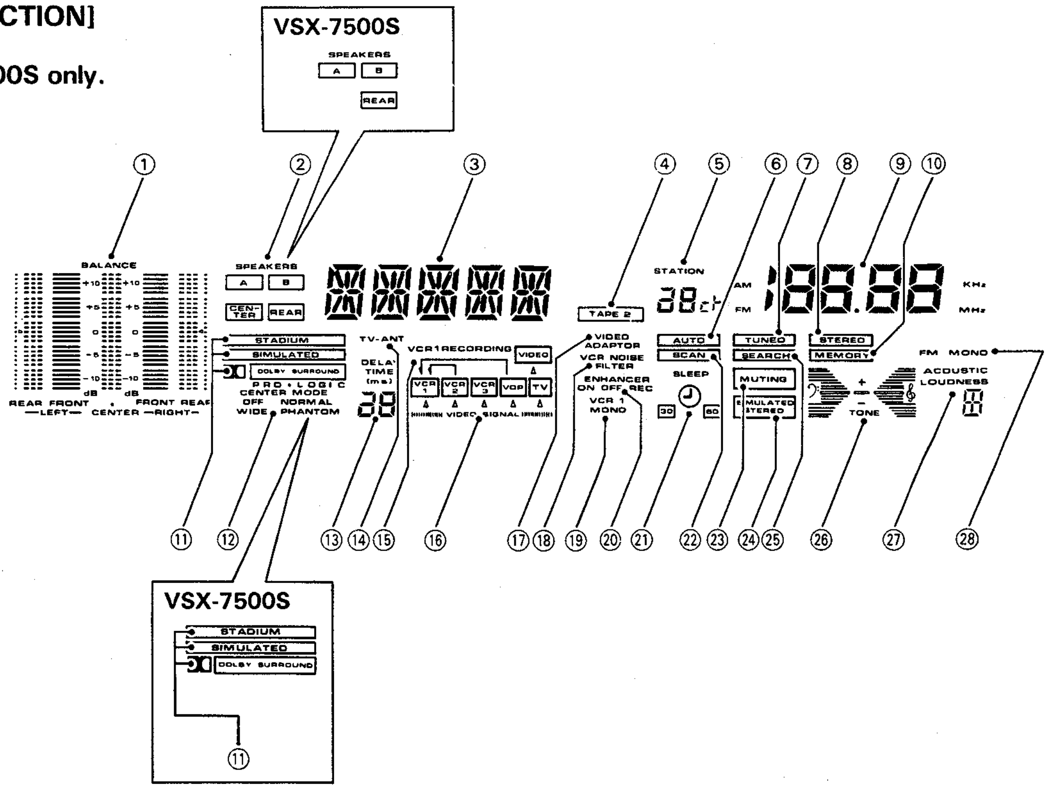
Pressing this switch returns the receiver to the following settings, the sound level being controlled by MASTER VOLUME control knob.

• TAPE 2 MONITOR	OFF
• SURROUND MODE	FF
• SPEAKERS A	ON
• MUTING	OFF
• FRONT BALANCE	CENTER
• FUNCTION	TUNER
• STATION CALL	1 CH *
• VIDEO ADAPTOR	OFF

- When a station is not memorized in 1 CH, station search will automatically proceed from the frequency displayed.

[DISPLAY SECTION]

⑫ ... **VSX 9500S only.**


VSX-7500S
SPEAKERS
A
B
REAR
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
BALANCE
+10
+5
0
-5
-10
dB
REAR FRONT
FRONT REAR
—LEFT— CENTER —RIGHT—
SPEAKERS
A
B
CEN-TER
REAR
STADIUM
SIMULATED
DOLBY SURROUND
PRO • LOGIC
CENTER MODE
OFF NORMAL
WIDE PHANTOM
TV-ANT
DELAY TIME (ms)
VCR1RECORDING
VIDEO
VCR 1
VCR 2
VCR 3
VDP
TV
VIDEO SIGNAL
TAPE 2
VIDEO ADAPTOR
VCR NOISE FILTER
ENHANCER ON OFF REC
VCR 1
MONO
STATION
AM
FM
AUTO
SCAN
SLEEP
30
60
TUNED
SEARCH
MUTING
SIMULATED STEREO
STEREO
MEMORY
KHz
MHz
FM MONO
ACOUSTIC LOUDNESS
TONE
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
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㉗
㉘
VSX-7500S
STADIUM
SIMULATED
DOLBY SURROUND
⑪

[DISPLAY SECTION]

① BALANCE/LEVEL meters

② SPEAKERS indicators

Shows which speaker system (or systems) are switched ON.

③ Function & Station name display

④ TAPE 2 indicator

Lights when the INPUT SELECTOR is set to TAPE 2 MONITOR ON.

⑤ STATION display

Shows the channel selected with the STATION CALL switch.

⑥ AUTO indicator

Lights when the AUTO/MANUAL TUNING is set to AUTO.

⑦ TUNED indicator

Lights when a station is tuned.

⑧ STEREO indicator

Lights when a stereo FM broadcast is being received.

⑨ Frequency display

⑩ MEMORY indicator

⑪ Surround mode indicators

⑫ DOLBY PRO LOGIC SURROUND CENTER MODE indicators (VSX-9500S only)

Displays the mode selected with the CENTER MODE switch.

⑬ DELAY TIME display

Shows the delay time during surround operation.

⑭ TV-ANT indicator

Lights when TV mode is selected with the TV ANT switch.

⑮ VCR 1 RECORDING display

Displays a " ↓‾‾‾‾‾| " symbol to indicate the copy mode selected with the VCR 1 REC SEL switch.

⑯ VIDEO SIGNAL SELECTOR indicators

Shows the video component selected with the VIDEO SIGNAL SELECTOR switch.

⑰ VIDEO ADAPTOR indicator

Lights when the VIDEO ADAPTOR switch is in the ON position.

⑱ VCR NOISE FILTER indicator

Lights when the VCR NOISE FILTER switch is in the ON position.

⑲ VCR 1 MONO indicator

⑳ ENHANCER ON, OFF, REC indicators

Shows the current VIDEO enhancer setting.

㉑ SLEEP timer indicators

Shows the SLEEP timer setting (the length of time from the set time to the point at which power will switch off). Only activated by remote control.

㉒ SCAN indicator

Lights during memory scan operation.

㉓ MUTING indicator

㉔ SIMULATED STEREO indicator

㉕ SEARCH indicator

Lights during HITS operation.

㉖ TONE level indicators

Shows the settings of the BASS and TREBLE level.

㉗ ACOUSTIC display

Shows the setting of the ACOUSTIC SELECT switch.

㉘ FM MONO indicator

Lights when the FM MONO mode is selected with the FM MODE switch.

9. SPECIFICATIONS

Amplifier section

[POWER AMP IN]

Continuous average power output of 125 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.005 % total harmonic distortion (front); 30 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.08 %** total harmonic distortion (rear); 30 watts*, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.08 %** total harmonic distortion (center: VSX-9500S only).**

Dynamic power (2 Ω/4 Ω/8 Ω) .... 280 W/260 W/185 W

Audio section

Damping Factor
  1 kHz, 8 Ω 100
Input (Sensitivity/Impedance)
  PHONO MM .... 2.5 mV/47 kΩ
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3 .... 150 mV/47 kΩ
  POWER AMP IN .... 1 V/47 kΩ
Phono Overload Level (T.H.D. 0.08 %, 1000 Hz)
  PHONO MM .... 150 mV
Frequency Response
  PHONO MM .... 20 Hz to 20,000 Hz ±0.3 dB
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3 .... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
  TAPE 1/DAT REC, TAPE 2 REC, VCR 1 OUT,
  VCR 2 OUT .... 150 mV/2.2 kΩ
  PRE AMP OUT .... 1 V/220 Ω
Loudness Contour .... +6 dB (100 Hz)
  +3 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
  PHONO MM .... 82 dB
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3 .... 98 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]
  PHONO MM .... 77 dB
  CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,
  VDP/CDV, VCR 1, VCR 2, VCR 3 .... 80 dB

VIDEO Section

Input (Sensitivity/Impedance)
  VCR 1, VCR 2, VCR 3, VDP/CDV, TV, VIDEO,
  ADAPTOR .... 1 Vp-p/75 Ω
Output (Level/Impedance)
  VCR 1, VCR 2, ADAPTOR, MONITOR .... 1 Vp-p/75 Ω
Frequency Responce
  VCR 1, VCR 2, VCR 3, VDP/CDV, TV, VIDEO,
  ADAPTOR→MONITOR .... 5 Hz — 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio .... 55 dB
  Cross Talk .... 55 dB (3.58 MHz)
  Enhancer .... ±3 dB (2 MHz)

[S terminals]

Input (Sensitivity/impedance)
  VCR 1, VCR 2, VDP/CDV .... Luminance signal: 1 Vp-p/75 Ω
  Color difference signal: 0.286 Vp-p/75 Ω
Output (Level/impedance)
  VCR 1, VCR 2, TO MONITOR TV. Luminance signal: 1 Vp-p/75 Ω
  Color difference signal: 0.286 Vp-p/75 Ω
Frequency response
  Luminance signal .... 10 Hz to 10 MHz, $^{+0}_{-3}$ dB
Signal-to-Noise Ratio
  Luminance signal .... 55 dB
Cross talk .... 55 dB (3.58 MHz)

Surround section

Input (Sensitivity/Impedance)
  REAR POWER AMP IN .... 1 V/47 kΩ
  CENTER POWER AMP IN .... 1 V/47 kΩ
Output (Level/Impedance)
  REAR PRE AMP OUT .... 1 V/470 Ω
  CENTER PRE AMP OUT
  VSX-9500S .... 1 V/470 Ω
  VSX-7500S .... 2 V/470 Ω

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono; 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity	Mono; 15.3 dBf, (1.6 μV/75 Ω)
	Stereo; 37.0 dBf, (19.5 μV/75 Ω)
Signal-to-Noise Ratio	Mono; 80 dB (at 65 dBf)
	Stereo; 75 dB (at 85 dBf)
Distortion	Mono; 0.08 % (100 Hz)
	0.08 % (1 kHz)
	0.2 % (6 kHz)
	Stereo; 0.2 % (100 Hz)
	0.15 % (1 kHz)
	0.3 % (6 kHz)
Capture Ratio	1.0 dB
Alternate Channel Selectivity	65 dB (400 kHz)
Stereo Separation	50 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz $^{+0.5}_{-2.0}$ dB
Image Interference Ratio	50 dB
IF Interference Ratio	80 dB
AM Suppression Ratio	55 dB
Spurious Interference Ratio	70 dB
Antenna Input	300 Ω balanced
75 Ω unbalanced	

AM Tuner Section

Frequency range	When 10 kHz step: 530 kHz — 1,700 kHz
	When 9 kHz step: 531 kHz — 1,602 kHz
Sensitivity (IHF, Loop antenna)	300 μV/m
Selectivity	30 dB
Signal-to-Noise Ratio	50 dB
Image Interference Ratio	40 dB
IF Interference Ratio	65 dB
Antenna	Loop antenna

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Miscellaneous

Power requirements	
U.S., Canadian models	AC 120V, 60 Hz
Other destination models	AC 110/120–127/220/240V
	(switchable), 50/60 Hz
Power consumption	
U.S., Canadian models	
VSX-9500S	580 W, 750 VA
VSX-7500S	550 W, 660 VA
Other destination models	
VSX-9500S	900 W
VSX-7500S	800 W
In stand by condition	3 W
AC Outlets	
U.S. and Canadian models	
VSX-9500S	SWITCHED x 2: TOTAL 200 W MAX
	UNSWITCHED x 1: 200 W MAX
VSX-7500S	SWITCHED x 2: TOTAL 300 W MAX
	UNSWITCHED x 1: 200 W MAX
Other destination model	SWITCHED x 2: TOTAL 100 W MAX
	UNSWITCHED x 1: TOTAL 100 W MAX
Dimensions	420 (W) x 155.5 (H) x 421 (D) mm
	16-9/16 (W) x 6-1/8 (H) x 15-9/16 (D) in
Weight (without package)	
U.S. and Canadian models	
VSX-9500S	13.6 kg (30 lb)
VSX-7500S	12.4 kg (27 lb 5 oz)
Other destination models	
VSX-9500S	13.7 kg (30 lb 3 oz)
VSX-7500S	12.9 kg (28 lb 7 oz)

Furnished Parts

FM T-type antenna	1
AM Loop antenna	1
Dry cell battery (LR03/AM-4)	4
Remote control unit	1
Operating Instructions	1
Templates added	2

NOTE:
Specifications and the design subject to possible modifications without notice due to improvements.

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*
** *Measured by Audio Spectrum Analyzer.*